The Board met via Videoconference, at 1:00 p.m. EST, Steven Markowitz, Chair, presiding.

MEMBERS

SCIENTIFIC COMMUNITY
AARON BOWMAN
MARK CATLIN
KENNETH SILVER
MIKE VAN DYKE

MEDICAL COMMUNITY
GEORGE FRIEDMAN-JIMENEZ
ROSE GOLDMAN
STEVEN MARKOWITZ
MAREK MIKULSKI
CLAIMANT COMMUNITY

JIM H. KEY
DURONDA M. POPE
CALIN TEBAY
DIANNE WHITTEN

DESIGNATED FEDERAL OFFICIAL

MICHAEL CHANCE

ALSO PRESENT

KEVIN BIRD, SIDEM
JEFF KOTSCH, DEEOIC
RACHEL POND, DOL
CARRIE RHOADS, DOL
JOHN VANCE, DOL
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MR. CHANCE: Good morning and afternoon, everybody, let me get to my little script I have to read and we can get going.

As all of you know, my name is Michael Chance, I'd like to welcome you to today's teleconference of the Department of Labor's Advisory Board on Toxic Substances and Worker Health.

I'm the Board's designated federal officer, or DFO. Today's date is May 11, 2022, and this is Day 2 of two days of Board Meetings.

As always, we appreciate the time and diligent work of our Board Members who prepared for this meeting and for their forthcoming deliberations.

We are scheduled to meet today from 1:00 p.m. to 5:00 p.m. Eastern Time. Today's meeting, just like yesterday, will be a virtual video meeting and I have with me Ms. Carrie Rhoads, from Department of Labor, Mr. Kevin Bird
from SIDEM.

He is our logistics contractor. As I said yesterday, please be patient with any technical issues or extra time we might be taking with the WebEx documents.

They've been submitted yesterday so hopefully we will not see any glitches. A little bit about meeting operations and timing, we have a few breaks or at least one break on the agenda today.

As you did yesterday, please do not disconnect from the call during the breaks. For Board Members, please just set your phone or computer on mute and unmute when we resume.

This will make it easier for Kevin to make sure he has everyone that's participating in the discussion. Like yesterday, I think it's up to you whether or not you want to keep your video on while you're not presenting and just listen.

Copies of all meeting materials are in written public comments and will be available on the Board's website under the heading Meetings,
and the listing is there for this.

The documents will also be up on the Webex screen so everyone can follow along with the discussion. As you all know, but I'll read it out again, the Board's website is dol.gov/owcp/energy/regs/compliance/advisoryboard.htm.

If you haven't already visited the Board's website, please do so. After clicking on today's meeting you will see a few helpful hints and a page dedicated entirely to the meeting today.

The webpage contains publicly available material submitted to us in advance of the meeting and we will publish any materials that are provided to the Board.

We had a robust public comment period yesterday so we will definitely be willing to hear all those comments.

You should also find today's agenda and if you experience again any difficulties, please call or email energyadvisoryboard@dol.gov.
Kevin will be able to straighten it out. Hopefully we won't run into any trouble. Please also note -- I think I've already said this but I'll say it again -- that computers or phones should be muted for non-Advisory-Board members.

There is no public comment session today. The call-in information has been posted on the Advisory Board website so public members today will not participate. Yesterday was our day to get in some good public comments.

A little bit about the transcripts and minutes of the meeting, a transcript and minutes will be prepared from the meeting today during the Board's discussions today.

As we are on the teleconference line and video, please make sure that you speak clearly because as always we are having this transcribed.

As the DFO, I see the minutes are prepared and ensure they're certified by the Chairman, Dr. Markowitz.
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. If available sooner, they will be published before that date.

Also, I will be publishing verbatim transcripts which are obviously more detailed in nature. The transcript should be available on the Board's website in 30 days.

Again, as I did yesterday, it's very important and I'd like to advise the Advisory Board members that there are some materials that have been provided to you in your capacity as a special government employee and Members of the Board, which are not for public disclosure and cannot be shared publicly including in this meeting.

Please be aware of this as we continue with this meeting today.

This material can be discussed in a general way which does not include using any personal identification information like PII such
as names, addresses, specific facilities, specific cases being discussed or a doctor's name.

And again, please be mindful, Steven mentioned this yesterday and I mentioned it, that we are speaking on this for the next round for the Board. I encourage current Board Members and others here and serving to submit their nomination.

As always, we are very interested in promoting a diverse pool of Applicants so please do what you can to assist us in this endeavor to make the Board as representative of the population of the country as possible.

Information can be found on our website at the Advisory Board landing page or at the Federal Register. If you have any other questions on that, Carrie is always a very helpful resource.

So, I think with that, I will convene this meeting of the Advisory Board on toxic substances and worker health and I will now turn
over to Dr. Markowitz for introductions.

CHAIR MARKOWITZ: Thank you, Mr. Chance. Welcome back, everyone, good morning, good afternoon, welcome back to Board Members, our colleagues from the Department of Labor and members of the public.

It looks like we have 17 members of the public online so I think we should go through introductions quickly again. I think that's most easily done if I just call out people's names.

I'm Stephen Markowitz, I'm in occupational medicine, a physician, epidemiologist from City University of New York. Aaron Bowman?

MEMBER BOWMAN: Yes, I'm Aaron Bowman, I'm Professor and Head of the School of Health Sciences at Purdue University. I have expertise in the area of toxicology and I'm happy to be a Members of this Board.

CHAIR MARKOWITZ: Great. Dianne Whitten?

MEMBER WHITTEN: Morning, my name is
Dianne Whitten, I'm a RAD contact at Hanford. I am on the Hanford Atomic Trade Council advocate and I'm also a member of WEW.

CHAIR MARKOWITZ: Duronda Pope?

MEMBER POPE: Good morning, my name is Duronda Pope, I'm a retired Rocky Flats worker for 25 years and currently, United Steelworker's Director of Emergency Response team that responds to fatalities and critical injuries.

CHAIR MARKOWITZ: Thank you. George Friedman-Jimenez?

MEMBER FRIEDMAN-JIMENEZ: I'm George Friedman-Jimenez, I am a occupational medicine physician and epidemiologist, and my expertise is in clinical occupational medicine and occupational epidemiology including diagnostic testing and clinical epidemiology.

CHAIR MARKOWITZ: Jim Key?

MEMBER KEY: Good afternoon, I'm Jim Key, I'm President of United Steelworker's International Union's Atomic Energy Worker Council based in Washington D.C. The Council
represents the United Steelworkers at eight of the DOE environmental management sites across the nation.

By trade I'm an electrician with a 48-year employee at the Paducah Gaseous Diffusion Plant, I served 18 years as the local union's health and safety representative at the Gaseous Diffusion Plant.

I've been involved with the former rate Worker's Health since its inception in the late 1990s and early 2000 and the passage of the EOPA legislation.

CHAIR MARKOWITZ: Ken Silver?

MEMBER SILVER: Ken Silver, associate professor of environmental health at East Tennessee State University.

I've been on the Board since its inception in the same era that Mr. Key referred to. I lived in New Mexico and worked closely with Los Alamos workers and families to get the law passed.

And exactly 20 years ago today we had
an overflow hearing at El Convento, a meeting space in Espanol in New Mexico, to hold the Assistant Secretary of Energy accountable for lapses in the compensation program and that generated momentum for the passage of Part E two years later.

CHAIR MARKOWITZ: Marek Mikulski?

MEMBER MIKULSKI: Good afternoon, Marek Mikulski, I'm an occupational epidemiologist with the University of Iowa. Also, I direct a former worker program for the former DOE workers from the State of Iowa.

CHAIR MARKOWITZ: Mark Catlin?

MEMBER CATLIN: My name is Mark Catlin, I'm a industrial hygienist, I'm currently semi-retired, I retired in 2018 as Health and Safety Director for the Service Employees International Union and I'm happy to be on the Board.

CHAIR MARKOWITZ: We're happy to have you. Michael Van Dyke?

MEMBER VAN DYKE: Mike Van Dyke, I'm
an industrial hygienist and associate professor at the Colorado School of Public Health.

CHAIR MARKOWITZ: Rose Goldman?

MEMBER GOLDMAN: Glad to be here.

I'm a clinical occupational environmental medicine physician with decades of practice, also associate professor at Harvard Medical School and have a special interest in toxicology as well as metals and solvents.

CHAIR MARKOWITZ: Let me turn it back to Mr. Chance who's going to tell us about the status of the Board's request for resources.

MR. CHANCE: At present, we went out and did a little bit of market research, gathered a good amount of information from vendors that are interested in doing the work.

And we've been working with Steven and I'm sure others on the Board have been helping him to try to flesh out the proper expertise they're interested in and trying to cost that out, government contracting cost per hour for those respective job types.
And so at the present time, we are continuing to finalize the paperwork on that and the next step is that it will be moving through clearance in the Department and I think we need more on that.

Steven, you have to help me with this because there's been a lot of back and forth. Have you finished your review of the statement of work?

CHAIR MARKOWITZ: Yes, I sent in multiple comments, they were accepted and there is a final performance work statement.

MR. CHANCE: Yes, so right now that's where we are and Steven, I think that's pretty much all I can say for today and I'll just keep you updated on the process of it.

But it is moving forward and at this point it's going to go into departmental clearance and we'll what happens with it from there.

CHAIR MARKOWITZ: Any timetable?

MR. CHANCE: Can't commit to anything
at the moment.

CHAIR MARKOWITZ: As you all warned, it's a protracted process but we look forward to the end. Let's move along. Kevin, if you could just bring up the Board's charter for a moment so we could just take a look at it?

Before we go back to reviewing claims, I just wanted to remind Board Members of what we need to pay attention to as a board.

These are the focusing of our tasks by the charter and ones the most relevant for review of claims I think is 2, medical guidance, the claims examiner for claims under Subtitle E with respect to the weighing of the medical evidence of claimants.

I should say that also includes Subtitle B of the act.

And the fourth bullet, the work of the industrial hygienist and staff positions and consulting positions of the department and reports of such hygienists and physicians to ensure -- here are the key words -- quality,
objectivity, and consistency.

And then finally, the next bullet item, which is that it's within our scope to examine and weigh in on the claims adjudication process generally, including review of procedure manual changes.

So, we just keep that in mind as we go through the claims.

I am collecting what I would call areas of concern, taking notes on the comments on the claims, not specific claims per se but just general areas that are repeatedly touched on as we discuss claims.

And then towards the end of the meeting we need to decide what the next steps are.

I'm not sure that we're going to have a chance to review all the claims today but we're having a very good discussion and we also see repetition of many of the same issues in various claims.

So, I'm not sure that we actually need
to get through every last claim but we'll try.

We're going to start now so you can actually take that off. We're going to start now with claims review. I want to front-load that Dr. Van Dyke looked at because he needs to go through each class at 2:00 p.m.

So, I think we should start with the beryllium claim, the last four digits is 2157, and the two reviewers are Dr. Van Dyke and Dr. Silver.

And while you're looking through your notes on that, let me just call out the next one we'll do, which is a Parkinson's Disease claim that also involves Dr. Van Dyke and Dr. Goldman. And that's 9787.

So, the first one will be 2157, beryllium, and then we'll go to 9787. It doesn't matter what order we go in in terms of the reviewer, whether Dr. Silver or Dr. Van Dyke, you want to start on the beryllium claim, entirely up to you.

MEMBER VAN DYKE: I can start, this is
Dr. Van Dyke. So, the beryllium claim, just a quick note, this is actually two claims. This is a claim in 2018 for beryllium sensitization and a claim in 2019 for CBD.

This is an individual who worked for many years at a beryllium contracting facility that was covered by DOE. This guy worked for 45 years at this facility.

And I think from an exposure standpoint this is a fairly easy case because his exposure was substantiated by a letter from the facility saying that he was exposed to airborne beryllium during the course of his work.

And according to the procedure manual, if you worked for more than one day in one of these covered facilities, you become covered for your beryllium claim.

So, I think the exposure piece is easy, I think what's interesting about this claim is that this is an individual that was referred to a physician in 1990 for abnormal chest X-ray and he was worked up for the potential of
beryllium disease in 1990, including CT, including a biopsy, including beryllium blood LPT as well as BAL LPT.

In 1991 he was diagnosed with sarcoidosis and this was mostly on the basis of a negative blood LPT, negative BAL LPT. So, really, no evidence of beryllium sensitization.

But he did evidence of granulomas on biopsy, which is a hallmark of both sarcoidosis as well as chronic beryllium disease. So, the case goes cold until 2018 when this case was filed.

This was subsequent to a positive or abnormal blood LPT. So, in 2018 he filed for beryllium sensitization on the basis of this abnormal LPT.

He was awarded beryllium sensitization and subsequently, it seems like fairly quickly after that was awarded, he filed for CBD benefits under Part D, and this was substantiated based on the medical information from 1990.

So, I think what's interesting is the
only thing standing in this individual's way of a CBD diagnosis was really evidence of beryllium sensitivity which was found in 2018.

They did look at would this individual have met the diagnostic criteria for CBD prior to 1993 and what they found was he definitely had exposure to beryllium but he only really met two of the three criteria for two of --

He didn't meet three of the required criteria for the 1993 diagnosis. So, I think from an exposure standpoint, it's an easy case, it was substantiated that he was exposed to beryllium.

It does bring up some of the difficulties with the diagnostic criteria for beryllium disease and I'm not sure there's an answer to it because there actually are some people who do get diagnosed with sarcoidosis that work with beryllium.

So, it is a difficult case from that perspective and I think it's unfortunate that it took 30 years for a diagnosis of chronic
beryllium disease, but I'm not sure how that could have been avoided necessarily.

CHAIR MARKOWITZ: That's really interesting. Dr. Silver?

MEMBER SILVER: That was an excellent summary, Dr. Van Dyke.

The only thing I would note that I was not aware of is an authorized representative was from the Human Resources Department of the company that had the contract to do beryllium for the Government.

And there's no evidence that company representative took any money but it just goes to show how thoroughly institutionalized this benefit program has become throughout the DOE complex and subcontractor complex.

It seems to be handled as a routine matter of health insurance, not health insurance but an EOC claim by someone at the company, which is progress.

CHAIR MARKOWITZ: I'm actually looking at the procedure manual because certainly with
those it was an issue that the Board had dealt with early on in 2016, 2017. But I don't know whether you all had a chance to look at this, Page 178?

Let me just read it to you.

Quote, under Part D the DEEOIC recognizes a diagnosis of pulmonary sarcoidosis, especially in cases with pre-1993 diagnosis dates could represent a misdiagnosis for CBD.

As such, a diagnosis of pulmonary sarcoidosis is not medically appropriate under Part B if there is a document and history of beryllium exposure.

In those situations, a diagnosis of sarcoidosis is a claim for beryllium sensitivity and/or CBD.

Under Part E, if there is a diagnosis of pulmonary sarcoidosis but no affirmative evidence in the form of a positive BeLPT or a BeLTT, the CE indicates the condition as sarcoidosis, not CBD.

That's a little confusing but the
procedure manual actually addresses this point in the last statement and said if there's no positive BeLPT, the claims examiner identified the case as CBD.

But it's not clear whether that applies to pre-1993. So, in any case, I also don't know when this part of the procedure manual was new or at what point his original claim was adjudicated.

In any event, there is some detailed language in the procedure manual about recognition of sarcoid as a fairly high likelihood of actually being a CBD. It's worth taking a look at.

MEMBER VAN DYKE: Steven, I think the only issue with that is in the 1990s you actually had negative blood LPT and negative lavage LPT. It ruled out somewhat beryllium disease at that time.

It's tough, definitely a tough case. From a medical perspective, it underscores the potential importance of continuing to get an LPT
on a serial basis more than anything else.

CHAIR MARKOWITZ: And we don't need to discuss the medicine here but actually, for at least the doctors on the Board, whether his underlying sarcoid was accelerated when his BeLPT became positive would be an interesting issue.

But I think not for today. Any other comments on this case? Let us go to the case of Parkinson's Disease, also with Dr. Van Dyke and Dr. Goldman, 9787.

MEMBER GOLDMAN: Who do you want to go first?

CHAIR MARKOWITZ: Entirely up to you. While you're deciding, the next one up after that is going to be 0014, which is Jim Key and myself. Go ahead.

MEMBER VAN DYKE: I can start, or you, it doesn't matter to me, go ahead.

MEMBER GOLDMAN: I'll just present a little bit from the medical because I actually had some IH things that maybe you could address.

So, basically this is a person who presented
with a resting tremor.

By the way, this person had exposure to what looks like potassium permanganate and he was referred for both IH and the expert medical examiner.

The presentation started with resting tremor, which puts it more in the category of more idiopathic Parkinson's Disease, rather than a manganese or that type of Parkinson's that tends to start more with the walking and stiffness problems.

The other thing that was sort of against it from the medical point of view is it was a gap of 18 years from the last significant exposure and onset, also making that less likely.

There was an IH review and it looked like -- this is interesting and I'll wait for Dr. Van Dyke. His only exposure was potassium permanganate and in the SCM that is listed as something associated with Parkinson's because of the Manganese.

But I have to say I tried to look up
whether potassium permanganate could cause Parkinson's and I wasn't able to find it. It's beyond the scope of what we're doing to try to see how much it would absorb and actually get exposure to manganese.

But it seemed to me this was a reasonable review including the IH and a qualified CMC who gave a very potent analysis and reasoning why this was denied.

So, I'll turn it over to you Michael.

MEMBER VAN DYKE: I would agree, it's a pretty well thought out case.

Before I talk about the IH, I will say I think the main reason this was denied was based on the CMC review saying that they didn't believe this particular Parkinson's was related to chemical exposure.

But in terms of the IH, I think brings up some interesting issues. This individual was employed for more than 30 years and was exposed to lots of different things in their line of work.
There wasn't a lot of documentation but it feels like they zeroed in on potassium permanganate because potassium permanganate was on the list in the CEM, or the FEM, sorry, of things that could be associated with Parkinson's.

So, I think that's the reason they zeroed in on that particular chemical. In the IH review, they state this person was significantly exposed to potassium permanganate at low to very low levels and not above regulatory levels.

I don't necessarily disagree with the overall assessment of the industrial hygienist, I just think in all the cases I reviewed it brings up the imprecision of the language in the IH reviews.

First of all, everyone that I've reviewed so far talks about the word significant. And I think significant really combines the concepts of frequency, duration, and intensity of exposure and may mean different things to different people.

In addition, when folks talk about the
regulatory level this again is ambiguous and it's unclear whether they're referring to the contemporary regulatory level at the time the sample was taken or the current regulatory level at the time the report was written.

So, I think there's definitely some work that could be done to really make that language more precise.

And then I think the biggest problem is, really, this use of high, low, moderate, very low terminology that really appears to only be defined in the mind of the industrial hygienist writing the report.

Now, I think you get three industrial hygienists together and we could agree what high, medium, and low looks like. But I think when you try to translate that information to the physician, they're going to have a very different idea of what that means.

I've spent most of my career working with occupational physicians and those terms don't mean the same thing to an industrial
hygienist as they mean to an occupational physician.

So, I really think there needs to be some work in terms of really defining what those terms mean and making sure the language is a little more precise, and I think that's particularly true since we're trying to communicate across disciplines where words mean different things.

So, if we could be more precise it would add to the consistency of this process. But in terms of the actual case, I believe they came to the right conclusion and my only concern is just the overall issues around the IH reviews and the imprecision in the language.

MEMBER GOLDMAN: I just want to say I couldn't agree more heartily with what Dr. Van Dyke just said, there are issues throughout and also, what does significant mean?

It has a different meaning in epidemiology and significant could mean many things to different people and you're totally
right about the different standards. So, I agree a lot and I think this is an issue we've seen through many of the cases.

CHAIR MARKOWITZ: Thanks, and we'll follow up in just a few minutes with Mr. Kotsch about this so it's good timing. Let me just add very briefly, when I see the word significant, I interpret that as meaning capable of causing disease.

And so when I see significant combined with very low to low, I find that confusing because normally, very low to low doesn't cause much disease. That's just to reinforce Mike's point that these words mean different things to different disciplines.

Let's move on, there's a case of cancer, 0014, that Mr. Key and I are involved with looking at. Let me just say in terms of who's on deck next, after this we will do a chronic lung disease case with Dr. Van Dyke and myself actually.

0014, Mr. Key, do you want to go first
or do you want me to go first?

MEMBER KEY: Go ahead, Dr. Markowitz.

CHAIR MARKOWITZ: This is a straightforward case of a person in their 60s, worked at a Southern DOE facility.

She developed lung cancer, thyroid cancer and her job title for five years was administrative assistant where she had a second title which was very closely related but it was clearly administrative work.

And it was a denial, both the lung cancer and the thyroid cancer, in that it was judged that she didn't have sufficient exposure to produce the cancer.

They zeroed in on possible asbestos exposure and I agree with the conclusion that there really wasn't sufficient evidence to demonstrate that she had enough exposure.

The other question I had on this case was that in her occupational health questionnaire, she identified that she used to go to different buildings to deliver reports and
also that she used to handle contaminated records.

I'm sure that was part of her thinking in submitting the claim and I didn't see it, actually, in the industrial hygiene report that those issues were addressed, I may have missed them, big file.

But I didn't see the consideration of where her specific issues or questions were actually addressed in the report. But overall, I agree with the overall decision.

The last point is that in the industrial hygiene reports, I don't see listed what they review in producing a report.

I see a standard, largely unchanged list of references but I don't see which documents they actually looked at it in writing up their review, which I think should be part of the process.

That's all I have. Mr. Key, any comments?

MEMBER KEY: No, sir, I agree with the
other comments you just presented.

CHAIR MARKOWITZ: Okay, we're going to move on to this next case. After this, in terms of who's on deck, we have a case of chronic lung disease, it's Mr. Key, it's Dr. Friedman-Jiminez and it's 2282.

If you want to pull out your notes there but right now we're going to 7016, another chronic lung disease case with Dr. Van Dyke and myself.

Dr. Van Dyke, do you want to go first?

MEMBER VAN DYKE: Sure, this one is definitely a harder case with respect to exposure than some of the other ones we've looked at.

So, this is a case of somebody that submitted a pulmonary fibrosis claim that was denied.

This was an individual who was a lab tech for many years at a facility and when they talk about their exposure, they talk about their exposure to lots of different things, metals, plastic opacities, urethanes, silicone potting
They talk about exposure to solvents, they talk about exposure to several metals as well as possibly silica.

They list a long list of things that they're exposed to and then you look at what causes pulmonary fibrosis and among those things you look at what causes pulmonary fibrosis in the SCM and it seems that you zero in on those particular exposures that are associated with pulmonary fibrosis and SCM.

It turns out they start to focus on things like asbestos, aluminum, carbon graphite, calin, silicone, silica, as well as titanium dioxide. And throughout the assessment, they confirm exposure to these things to low or very low levels.

But now we have a confirmed exposure to something that's associated with these outcomes and mostly the case hinges on the denial by the CMC. And so the physician basically says this doesn't look like asbestosis.
The CT scan is not consistent with hard metal disease, exposures aren't high enough for any sort of pulmonary fibrosis due to carbon exposure. And in the end, this doesn't look like silicosis as well.

I think that in the end it really hinges on the opinion of the physician that this doesn't look like any of the diseases that would be associated with any of those particular exposures that they delved into.

I think one of the concerns that I have is that there were lots of exposures that really weren't explored much, I think particularly thinking about exposure to some of these epoxy resins wasn't thought about very much.

But it's not on the list of positive agents for pulmonary fibrosis.

So, I understand that each one of these is not a research project but I do think that a little thoughtfulness in terms of some of these other exposures may have been warranted in
this case.

Steven?

CHAIR MARKOWITZ: On the medical end, the doctors at CMC decided this was not asbestosis. I think it's unlikely to be asbestosis but I disagree with the physician's logic.

He basically read the findings on the CT scan as representing that's called usual interstitial pneumonia, or pneumonitis, and frankly, those findings overlap with asbestos of the lung tissue itself.

He or she said, I can't remember, that the absence of total plaques, the scarring of the lining of the lung, meant that it wasn't asbestosis, that's not correct.

So, I disagree not with the ultimate decision but with the way in which the CMC evaluated the case.

Also, as a lab technician, the likelihood of them having sufficient asbestos exposure to cause asbestosis, which generally
requires a higher level of exposure, it's pretty low.

On the exposure side, a 35-year lab technician is tough because to have any exposures, 1966, it's in the earlier days of DOE and frankly, this is the kind of person I think where an interview of the person would have given a lot of insight into the intensity and frequency of their exposures over the years.

And that didn't happen. I'm just looking at my notes here.

The claimant did write a letter in 2020 about her work, and I can't tell whether the industrial hygienist looked at that letter or not when they produced a report for the same reason I mentioned before.

So, those are the limitations that I identified. Let's continue here, I think we're going to do 7716, another chronic lung disease case. Is that the one I mentioned?

I think so.

MEMBER SILVER: On deck?
CHAIR MARKOWITZ: Yes, I think my notes are a little confusing here. I think it was 7716, yes, that's Dr. Goldman and Dr. Silver, chronic lung disease.

MEMBER GOLDMAN: If it's okay, I would like to do this one and contrast it to 2560 if you don't mind.

CHAIR MARKOWITZ: We can do that one next, that's good.

MEMBER GOLDMAN: Because I think this illustrates a very important point and let me just do both of them and get Mr. Catlin involved. But I think it's very interesting just to contrast these two that are similar in some ways but come up with a different outcome.

Let me just pull up my notes here first. In the case of...we'll do the one you selected first which was 7716. This was a person who already had a claim accepted from pneumoconiosis.

And so he had a B-reading that described small opacities, SNT diffuse upper,
middle, and lower lungs S/T but no plural abnormalities.

But he was already accepted for pneumoconiosis and it was up to the CMC to now give it a permanent rating.

And in both of these cases, they did the same thing, they use the AMA guide's definitions of the lower limit of abnormality. LLN, and then in this report, this CMC pays attention to the claimant has a report of breathlessness.

And on the pulmonary function test, and I know we have some non-physicians here, what you do is you look at the FEV1 which is how much air you can blow out forcefully, the FCC, which is how much comes out in six seconds.

And you're looking at the ratio of FEV1 to FVC because if it's lower it means obstruction and also in the case of interstitial lung disease we're looking at something called the single-breath diffuser capacity and also lung volumes.
So, this particular CMC looks at the whole picture, doesn't restrict itself, excuse the pun, to restrictive lung disease.

The person has a normal FEV1, a normal FVC, a normal diffusion capacity but has a slightly lower FEV1/FVC of 74 percent when there's a lower limit of normal of 76 percent.

So, this is a very subtle difference and using the AMA guide, which at some point you could show this where the ratings are, on the rating scheme not necessarily restricting for restrictive lung disease, the zero percent category excludes a lower FEV1/FVC so this CMC person goes to the next category and this is easier to see, meaning see if you could show that chart that I sent to you, which is I think 15 -- hold on I have it here.

The next class, Class 1, is 0 percent and the next class is 10 percent to 25 percent impairment of the whole person.

And so this CMC says given the symptoms that the person is having and its very
slight decrease in FEV1/FVC, you can't put him in the Class 1 so I'm going to give this person 15 percent impairment of the whole person.

Now, the reason I appreciate being able to contrast this to the other one, in the other situation which is 2560, this is a person who has plural plaques and again, the CMC is asked to and already compensated for that to assess pulmonary impairment due to plural plaques.

The CMC also has the PSPs, also refers to the AMA guide to impairment, does the same thing using their data and a lower limit of normal but this time the CMC totally organizes the approach to whether or not only the abnormality suggests a restrictive disease is present.

So, this CMC looks at FEV1/FVC diffusion capacity and since they're all above the lower limit of normal, as actually a large total lung capacity of 116 percent and actually has a reduced FEV1/FVC ratio of 66 percent.
So, clearly and actually some other things, small, some reduced flow in the small airways. So, in this case the person has some evidence of obstructive lung disease.

So, the question comes into this, well, should that be part of the consideration here? I'm doing an impairment for pulmonary but are we going to restrict it just to restrictive or interstitial lung disease?

And also, this claimant also had a lot of symptoms which were also ignored, which could be part of a rating system because there's a dyspnea rating system.

So, in this case the CMC took the data and because there was no evidence of restrictive lung disease at all, ignored the findings of the obstructive lung disease and gave the person zero level of impairment.

One could argue that may be legit if you're only restricting yourself to restrictive lung disease.

On the other hand, one could argue
that in some cases, there could be some underlying obstructive disease and also, there was no attention to other things he may have gotten exposed to.

But I basically just wanted to put those two cases out because the approach of the CMC was different.

Similar cases with this person having actually a more reduced and more evidence of obstructive lung disease who got no percent impairment and the other person with a very subtle finding getting a 15 percent impairment.

Thank you for the opportunity to present both of these cases and be able to contrast them.

CHAIR MARKOWITZ: Thank you for raising the issue of consistency. Dr. Silver, on the case you looked at, your comments --

MEMBER SILVER: Yes, one additional factoid and one question for the doctors. He also had a squamous cell carcinoma of the lip.

MEMBER GOLDMAN: They compensated for
that.

MEMBER SILVER: Right, the site exposure matrix found arsenic at the uranium mill, probably all of them because it was a component of the ore.

But the question is this, I have more than a lay understanding of occupational lung disease, so what struck me is here we have recognized pneumoconiosis and then when he tries to get this program to recognize pulmonary fibrosis he's denied for pulmonary fibrosis.

Did that turn on the lung function test?

MEMBER GOLDMAN: I thought he was compensated. Did I misunderstand that?

I thought they acknowledged that he had pneumoconiosis and he already had compensation for that. They just wanted to know the level of pulmonary impairment.

Maybe I misread it.

MEMBER SILVER: Yes, but he was -- see, this is the thing, I've heard this in other
cases. He was compensated by the Justice Department, which handles uranium workers for pneumoconiosis.

And then when he comes over to this program they say, yes, you have pneumoconiosis but in the weeds of the file they say, no, you don't have pulmonary fibrosis.

How often does that happen? Is it medically possible to have recognized pneumoconiosis without pulmonary fibrosis?

MEMBER GOLDMAN: I think you could have in the case of asbestos a few plural plaques and have no fibrosis. I believe in this person's case he did have fibrosis and he didn't have plaques.

So, in the case of plaque, you could have plaque and have asbestos-related plural disease and no fibrosis or you would have pneumoconiosis I guess, unless you say that pneumoconiosis is only with fibrosis.

Some cases of silicide you see spots but you don't actually have pulmonary impairment.
It's a dust-related disease.

MEMBER SILVER: I know, so that would be my understanding but I'll just throw out the page references. We won't get into them now, maybe I'll copy them and send them to a few of the doctors.

It's Page 178 and 185. This program said, no, no pulmonary fibrosis but we'll honest the Justice Department's pneumoconiosis recognition.

If you go out to the world of diagnosing physicians out there in America, the program could get a really dicey reputation if there are lots of people with recognized pneumoconiosis who are struck down for pulmonary fibrosis I think.

MEMBER GOLDMAN: I'm sorry, I thought this came up in a previous meeting in which there was an issue in which sometimes people have pulmonary fibrosis and it wasn't listed this could be asbestosis and vice versa.

MEMBER SILVER: That's the converse, I
understand there are causes of pulmonary fibrosis that are not dust, that's a separate issue.

Here he's recognized to have the dust disease of the lungs by the Justice Department, that's accepted.

But then for pulmonary fibrosis this program says no. I'll provide the page references and copies and maybe I'll be all wet but it just jumped out at me.

CHAIR MARKOWITZ: The other case that Dr. Goldman went over. Mr. Catlin, do you have any comments?

MEMBER CATLIN: I do, not on the part that Dr. Goldman covered so well but he also was denied a claim for basal cell carcinoma and this person was a long-time roofer sheet metal worker.

The SEM provided lots of identification of the types of potential exposures to coal tars and benzoapyrene and asphalt and other things that you would expect, especially with a roofer doing built-up roofing.

Two things stuck out, one was there
was a decision made that the carcinoma was on his nose.

There was a decision repeated several times that because it was on his nose, it couldn't have been work-related because it would have had to be on his hand because that's where he would have had the exposures.

I think that's an example of a question that could have been answered with a short discussion with the claimant about his work and what the potential exposures were.

My experience with roofers is that they can have exposures in all uncovered parts of the body. So, that's interesting.

The second part which I thought was especially interesting given our discussion on hygiene is like we've seen in other cases, the exposures are identified through the SCM.

The hygienist is referred to make a deeper assessment but they make an assessment that there are all these exposures. But they're essentially insignificant in terms of the levels.
The CMC actually made a comment in their report that said this industrial hygiene decision doesn't make any sense to me because roofing involves asphalt, et cetera.

And so in this case there was actually a difference of opinion where the physician is questioning the industrial hygiene conclusion.

Now, it doesn't seem to have made any difference in the case and it doesn't seem like that resolved anywhere but I think it's interesting to show that at least this physician didn't seem to understand why, why it didn't make any sense to them why the hygienist downplayed the exposure.

Those are the two things I thought were valuable in the other parts.

CHAIR MARKOWITZ: Let me ask you a question about the skin cancer. Was that denied, essentially, by the CMC who said no causation?

MEMBER CATLIN: Yes, and that was essentially a combination of insignificant exposure, but also because the carcinoma was on
the nose, that ruled it out as being work-related, which I can tell you I found -- I wouldn't have just gone right there without having talked to the claimant.

CHAIR MARKOWITZ: It was a long-time roofer?

MEMBER CATLIN: Yes.

CHAIR MARKOWITZ: Sounds bizarre to me. Any other comments?

MEMBER GOLDMAN: The CMC, were they commenting on the cancer or their letter was mostly directed to the pulmonary?

MEMBER CATLIN: The report that I reviewed was in the middle of the claim and it was only about the basal cell carcinoma part and not the impairment part.

It was a confusing case because I had several parts all mixed together which made it interesting to review.

CHAIR MARKOWITZ: We've seen the numbers have a very high percentage of non-melanoma skin cancers that are compensated. Any
other comments? Otherwise we're going to interrupt our claims review for a bit to speak with Mr. Kotsch.

Thank you, everybody. Mr. Kotsch, if you wouldn't mind unmuting yourself and be introducing yourself to the group?

MR. KOTSCH: Sure, I'm Jeff Kotsch, the manager of medical and health sciences unit, of which the industrial hygiene program is a part. I'm not an industrial hygienist, I'm a certified health physicist but I'll try to do my best with these things.

As far as your question, do you want us to go through them one by one or how do you want to approach them?

CHAIR MARKOWITZ: We have to make sure that we leave time for questions. If you want an initial couple comments, that's fine, otherwise we can go straight to the questions.

MR. KOTSCH: We can just start with the questions if you like.

CHAIR MARKOWITZ: Maybe it's easiest,
considering the participation of the public, if you scroll down a little bit?

What we have here for people is the Board two weeks ago submitted some questions to the program, which very nicely gave us a rapid turnaround on responses that we received maybe yesterday I think.

In any event, if you could scroll up, Kevin? The first question was we've taken note that many industrial hygiene reports referred to the fact that existing regulatory standards have not been exceeded.

There's no evidence they've been exceeded in particular claims. So, first question, again, Kevin, if you could just scroll up so we can see the response at the same time as we're looking at the question.

But the first question is what are the regulatory limits that are being cited in these reports?

MR. KOTSCH: As you can see, the Department of Energy historically has not adhered
to the OSHA limits or the PELs but have followed the lower, in almost all cases, ACGIH threshold limit, value time-weighted average levels.

And there's a discussion in there from that indices document what defines the TLV TWA, the TWA concentration for conventional 8-hour work days is a 40-hour work week, to which it is believed all workers may be repeatedly exposed day after day, or working a lifetime without adverse effects.

In essence, the DOL or the DOE applied the most restrictive standard or we applied the most restrictive standards and best information of DOE's worker occupations.

We looked at each on a case-by-case basis since there are obviously different sites around the complex.

MR. VANCE: Dr. Markowitz, this is John Vance.

I was chatting with Jeff and our industrial hygiene team this morning and I think one of the public commenters yesterday was
talking about the existence of reports about the OSHA standards and I don't think what we're trying to say here is that you're not going to see OSHA standards coming up.

It's just that when we're looking at it from our perspective and the knowledge of our industrial hygienist, this is what they're looking at and this is what they're seeing as part of the measures and sampling and that sort of thing, is the reference to these standards from the ACGIH.

That's the basis here so I think that don't get it wrong, we will see OSHA standards referenced but I think that from a safety and health perspective, most of these sites are trying to get through the more restrictive thresholds that were reported out by the ACGIH.

CHAIR MARKOWITZ: In 1995, DOE promulgated Rule 440 or Rule 440.1, I may get my numbers wrong. Prior to 1995, what DOE guidance rule determined what standards were followed?

MR. VANCE: I don't know that. Jeff,
do you have any idea?

MR. KOTSCH:  I don't know that, I know that in 1995 440.1 came into effect but I am not aware -- that relates to the DOE worker safety and health program. I can't say whether existed before, we'd have to check on that.

MR. VANCE:  I think one of the concerns here is that what we're acknowledging as a program is starting in that timeframe or right around 1995, there was a much more stringent effort to improve the occupational safety and health monitoring of employees.

So, that's where you start seeing this. There will always be arguments about whether or not Department of Energy complied with those or enforced them rigorously at all the sites.

But we're merely acknowledging that reality.

The other big issue here is people need to understand that even with the existence of these references to within regulatory limits,
this is still an exposure characterization, this is still a profile that is being prepared for a physician to consider in establishing whether or not a disease is contributory or aggravated by an exposure that is even within that regulatory limit.

So, we do have instances where someone can be exposed to a toxin that is within this ACGIH threshold, which a physician could look at and still opine as long as they had some sort of rationalization to support such a position, that that exposure was sufficient in their mind to be a significant factor in contributing to a disease.

So, keep in mind this is information that a physician has to weigh on and you're right, I think this was a prior comment that came up.

It is really left to the judgment of the physician and whether or not they're working with what they have in reaching that type of conclusion.
CHAIR MARKOWITZ: Just to follow up on Rule 440, did 440 reference TLVs of ACNJ as the standards to follow?

MR. KOTSCH: I'm not that familiar with that order. We'd have to check on that one.

CHAIR MARKOWITZ: 440 was filed later by 851 I think. Was 851 the next major relevant safety rule after 440?

MR. KOTSCH: There was a 441(a) in 1998. I don't know the particulars of that change but you're right, that did evolve in the 10 CFR 85 in 2006.

CHAIR MARKOWITZ: What year was 851?

MR. KOTSCH: 2006. From what I remember, back in the 1990s I was actually a consultant on the HP side of DOE when they were developing the RAD CON, the radiation control manual.

And I know there was a companion move on the IH side but I wasn't at all familiar with what they were doing then, but back in the early 1990s they were definitely moving on both sides
of the safety and health fronts to formalize the programs.

CHAIR MARKOWITZ: So, between 1995, Rule 440 and 441 in 2006, which is 851, and between 2006 and the present, 851 still rules so to speak, presumably ACGIH modified various TLVs in the interim period.

And so how do the industrial hygienists deal with the change in KLDs in the interim periods as they look at claims that go back years, decades, and the like?

MR. KOTSCH: The IH review is now basically the current -- I'm not going to go through the gyrations of all the different changes that may occur for different toxins over time.

So, they're basically applying their knowledge of what the current limits are, which are obviously more restrictive than what they were in the past.

Certainly, back then they would be more restrictive than what it might have been in
the past.

CHAIR MARKOWITZ: We're going to continue with these questions, I just covered the next couple questions anyway.

(Simultaneous Speaking.)

If other Board Members have comments or queries, feel free to just jump in.

MR. KOTSCH: You pretty much covered the second one, too, about the changes of the regulatory limits over time.

CHAIR MARKOWITZ: That's correct. They've gotten more conservative and restrictive with time.

MEMBER CATLIN: Dr. Markowitz, I had a question. His is probably a good time to deal with it.

Understanding that choosing some system for these exposure limits to have some comparison for it is necessary and certainly, the ACGIH is a pretty common one.

The things I read that you provided and that I've seen with my own experiences, the
ACGIH has consistently talked about the TLVs as levels that would protect nearly all workers.

I think back 25 years ago there was a lot of controversy within our profession and in the medical community about that.

When OSHA tried to update their PELs using ACGIH, there were a lot of detailed looks in it, that this protecting all workers was not really well defined and it could have varied from protecting 95 percent of workers to maybe only 75 percent of workers exposed at those levels.

So, it might be something the Department wants to engage with the ACGIH and look both historically and currently as to this language. My experience has been that when especially non-occupational medicine doctors who have greater knowledge see this language, they interpret this to mean, oh, if the exposures are below the ACGIH then they probably can't have occupational disease.

And I think that gets misinterpreted often and so I think that's something that needs
to be further investigated.

MEMBER GOLDMAN: I think that's a really well taken point and it's an interesting here from one who saw -- when OSHA first came in and set their standards, their standards were actually more it seems like than ACGIH.

And there was a lot of concern that the professionals in ACGIH were consulting a lot with industry. But then over time OSHA, because of all the contention about some of their standards, had lagged behind tremendously.

And in terms of some safe and glaring examples, for example being lead, actually, other professional organizations including ACGIH have proceeded to update standards or health-based standards.

And you're correct, ACGIH, their standards may not be as protective, let's say, as some European standards.

So, if I see somebody to say is this work-related or not, or that's the possibilities, I would look at the primary literature as well as
all of these varying standards to see where it comes in.

So, I actually think your point is really very well taken.

CHAIR MARKOWITZ: I'm going to move on to the next question, which is what constitutes the various types of evidence that demonstrate that regulatory limits have been exceeded?

Here I just want to briefly mention to the public that in general there are two types of standards, there's a short-term ceiling limit that might be exceeded for 15 of 30 minutes.

And then there's the standard that applies to the full 8-hour day. In occupational medicine we mostly focus on the chronic exposure, the 8-hour limit rather than the very short-term limit.

And so the answer to this question, we can read that in part it says after the mid 1990s, the principal source are employers in investigative reports communicating exposure incidents or events that may have placed the
employees in an exposure dynamic that was recognized as outside of accepted occupational safety and health standards.

So, what is that?

MR. VANCE: This is John. I think what we're talking about is from our experience of looking at these cases and I know this personally in looking at case files, generally there will be some incident or event that occurs that brings the employer into the work environment to do some sort of monitoring, whether that's a particular toxin, a particular chemical, or an incident or an accident that's occurred.

So, they'll come in and do some sort of assessment of the situation and do sampling and other types of monitoring activities. That's the kind of information that we would see in an individual employee's DAR.

And then that would drive the understanding by the industrial hygienist as to, yes, there was a viable exposure beyond what was
allowable in this particular scenario.

That's just our experience in looking at files. Jeff, I don't have if you have anything more you want to add to that?

MR. KOTSCH: Yes, that's primarily user incident reports or off-normal reports appear in the DOE records that we receive or the DIHs that receive the review.

They're not often but usually, at this point in time that we're talking about after the mid 1990s, DOE, even on the rad side, certainly before that on the rad side, the radiation side, when they had an off-normal event when something triggered a potential exceeding of the regulatory limits, there would be an incident report written, an accident report depending on what the actual situation was.

That would generally go under the person's DOE file and we would collect that information and forward it to the Department of Labor for review. That would be included in there.
MR. VANCE: I think we also see instances where after the mid-1990s we see a lot of instances where they're doing these recurring employee interviews and asking about occupational dangers that the employee felt were relevant.

And so every once in a while we'll see an employee complaining about an unusual smell or some other type of event or activity that they're concerned about and that would bring in someone looking at the scenario to try to figure out what was going on.

These are all very case-specific scenarios that we see from our experience in looking at the files.

MEMBER TEBAY: Can I speak here? Currently, I'm an employee at Hanford and I was a sheet metal worker here for lots of years.

There is no guarantee that even in an incident where we've exceeded those limits of the sampling equipment, that information is going to land in any kind of database that's accessible.

A lot of times, the smart thing to do
is to collect that data from your contractor, employer, and keep it for your own personal files.

Because that doesn't mean it's going to make it into the medical, it doesn't mean it's going to make it into the DOE database, it just doesn't guarantee anything.

Second, we have areas we enter daily that are demarcated by signings that would determine whether that's a rad area or there's some kind of toxic chemical exposure, beryllium, et cetera.

Now, I can enter those areas daily and there may never be an incident but that doesn't mean you're never being exposed. It just means that at the point of where that rad equipment is located, it's not detecting that exposure.

And we need to understand and I need to understand and CMC needs to understand that a lot of these work, somewhat of a scenario of my roles, my responsibilities, the work process, the procedure, it's outside.
Meaning that these outside sampling tools were in an outside when the area -- or a tank farm. A tank farm is a bunch of tanks underground, sampling equipment is above ground in certain areas surrounded by a fence.

So, we're not necessarily patching every single exposure every time there is one, you're going to get incidental exposure, you might get one every single day, it just may not be caught by the sampling equipment on that site.

MR. KOTSCH: You are correct, that's an inherent problem depending on how sampling is done.

MR. VANCE: I would merely add that could very well be the case and what we're talking about is what is the available evidence that an industrial hygienist or the claims examiner has access to during the information collection stage.

So, what we're simply saying is that in the instances where we've seen it, this is the kind of information that we have. But it doesn't
exist in the file or the DAR records, then it's not going to be something we can consider.

That's why it's important for us to get as much information from the claimant during the occupational history questionnaire and give the claimant the opportunity to try to identify anything that they feel is missing in the adjudication of their case.

MEMBER TEBAY: Sure, and I agree that's a tough spot to be in where the infrastructure doesn't exist.

On the other hand, I think we're seeing a trend in these IH reports that often end in every one of these exposures on these claims where the IH says there is no data to support that or no data or any evidence available that any of these exposures were significant, or they were significant but they were under regulatory limits, or they were incidental.

That draws a conclusion for the CNC that, hey, there was really never any exposure so how could there be any occupational disease,
which then draws the conclusion for the CE to deny the claim.

So, I think we've created this because there is no available documentation.

It seems to me all these claims and what we're seeing on a trend in the last two days, and we're going to see it in every claim I review, is that these IH reports often, more of than not, continue to hinge on the lack of documentation.

Even though the SIM will identify those exposures exist, because there's no evidence that they were actually exposed to those, we're going to lean to denying the claim.

MR. KOTSCH: Semi-satisfies the potential for exposure, that is what toxins may be available to be exposed in the tank farm in the building or on any particular site. Obviously, that doesn't always mean that a person gets that exposure.

And the lack of records is obviously an issue that makes the IH reviews more
qualitative than on the Part B side where we do the radiation exposures. We have much more quantitative information so that's obviously a drawback to the IH side.

But using professional judgment and knowledge of systems and processes --

(Simultaneous Speaking.)

-- to try to define an exposure.

CHAIR MARKOWITZ: I have a specific question. At the sites much of the work was done by major contractors. Was it the contractor that employed the industrial hygienist?

And if so, were any data that were generated by the industrial hygienist activities, would they be retained by DOE in the DAR process?

MR. KOTSCH: Currently, the contractors do employ the IHs. DOE does have IH Staff that's oversight but for instance, the contractor themselves would house all of that IH data.

Now, a lot of times, when the contractors leave the site or on some kind of
contractual obligation that information is turned over to DOE to put into a database.

But we've known on site for years, all of that does not always get transferred to DOE. There's stuff that's missing. So, it's a hit and miss scenario in my opinion.

CHAIR MARKOWITZ: Let me ask Mr. Kotsch. Going back in time, I think Kayla was talking about the present, going back to the 1980s, 1990s, the early 2000s, did contractors routinely give whatever monitoring -- or perhaps they just didn't monitor very much.

There wasn't much to give. And in fact, in the response to the next question we're looking at now, I just want to read.

It says in the absence of any incidents or circumstances that would warrant investigation by occupational health and safety experts, the employer generating sampling data are usually available and then later on you say except for a river and Rocky Flats, they were much better about this.
So, the thing is for chronic occupational diseases, meaning COPD, asbestosis, or the cancers, these are things that we've been looking at.

The incidental exposures or the accidents really don't matter because that's not what causes those diseases.

What causes those diseases is ongoing exposure. If the data doesn't exist, then they don't exist. And as you said, Mr. Kotsch, then you rely on expert judgment really.

MR. KOTSCH: I think that is valid and I know the industrial hygienists, especially in the early years, tried to if possible sign and potentially hire exposures because of the fact that we don't know.

There certainly probably wasn't much, if any, monitoring, even up until the early 1990s. So, that's definitely an issue. As far as the contractor information, I don't know.

I know even on the radiation side, a lot of times that resides with the contractor
organization of, you're right, maybe when a contractor leaves it gets transferred over to DOE but I don't know how routinely it is normally on the IH side.

That would show up in our information package that comes in.

But, yes, absolutely, the early days, obviously there was no monitoring, it's professional judgment and basically the rest of the assessment process to try to determine a level of exposure.

CHAIR MARKOWITZ: So, the next question we're looking at here is if no evidence concerning workplace exposures is available in either direction above or below regulatory limits, for a given claim is the conclusion usually drawn that regulatory limits have not been exceeded?

And the answer is yes. My question is, is it factually more accurate to conclude that we do not have available data to determine whether levels were above or below regulatory
limits.

Does that statement capture the underlying reality better? Rather than focusing on one part of that which is that we don't have data that show it would exceed.

Well, the truth is we don't have data that show either direction.

And so a more factual representation would be simply that the data was not collected that permit us to determine whether regulatory standards were exceeded or not.

MR. KOTSCH: That may be valid but still in the 1990s period, we're saying they could have been exposed up to the regulatory limits so it's not that they didn't have any potential exposure.

And obviously, we don't know that level without monitoring but they could have obviously been exposed up to, essentially, or at least been considered to be exposed up to the level, the regulatory limit.

So, it's not like they didn't have any
but you're right, in the absence of data we don't know one way or the other per se.

CHAIR MARKOWITZ: I don't mean to dominate this discussion, I'm just trying to follow the questions. If you have comments or questions jump in.

The next question is what sources of information do the industrial hygienists or the reports really use to examine frequency, intensity, duration, which are the key variables in understanding the significance of exposure.

And the response is that the IHs rely on their credentialed subject-matter expertise, professional experience, essentially expert judgment.

And then it says that many of the IHs previously worked or have firsthand knowledge of DOE-related operations and work processes.

And I don't mean to read this whole thing, I think this is on our website but if not, it will be. The fourth line says necessary to apply reasonable discretion to assign level of
exposure.

And to do that, the IH undertakes a careful review of the agents in question and unique factors of the employee's work history. And then it lists the source of information that the IH uses.

So, just to summarize, though, in the absence of monitoring data, what you have are experts who have some knowledge of the sites who are looking at whatever is available in terms of the description, the qualitative description, and then making a judgment about the meaning of those exposures.

Did I get that correct?

MR. KOTSCH: I think that's the essential. Basically, they're looking at whatever information is available.

The EE3 is basically the employment history, the occupational health questionnaire, or the interview, the intake of the workers, response to the various types of questions about his or her work activities, locations, things
like that.

And obviously, that gives us some idea of what maybe potential toxins were in those buildings or sites or whatever the person was working at, and any other information that was submitted by the claimant.

And if there were, indeed, any kind of off-normal reports that the claimant might provide, whether it's during this process or even afterwards when it gets to the recommended decision stage where they disagree the decision from DOL.

They can provide additional arguments or information to be reconsidered potentially by the industrial hygienist.

CHAIR MARKOWITZ: By the way, I agree with that process in general. I think that's what we do occupational medicine is take our knowledge and apply it.

But Dr. Van Dyke actually raised an interesting question earlier in the meeting and he had to go teach.
How do you address the issue of consistency among the various IHs in the contractor in calling something, some exposure, very low moderate?

It's easy to imagine what's low to one industrial hygienist might be either very low or moderate to another. Do you know how they address that?

MR. KOTSCH: You're right, obviously you would get differing opinions or you could potentially get that, there are a couple of things that are happening, they try to make it consistent.

So, one is there was a review by the contractor at the contractor level where everything comes together before it comes to us.

Certified industrial hygienists are reviewing all those things and thinking about I've seen this, we've been providing for this period of time in the 1950s or the 1960s, this particular level of exposure at a particular site as far as those kinds of things.
And then at our level we have one of our CIHs that basically looks at every one before it goes out.

And he has a pretty good memory as far as what we've seen at different sights, what levels we're assigned for different toxins at different facilities for different occupations.

And I don't know if John has any other insight but that's primarily how the consistency is arrived at.

MR. VANCE: And the only thing that I would add is that when it comes to the actual characterization of exposure, it came up in an earlier discussion about the significant, low, moderate or high.

In the procedure manual, we do fairly descriptive examples of what those things mean but it really is a matter of bifurcation.

Insignificant means that the lowest threshold of exposure that an industrial hygienist can give without saying no exposure, anything above that is going to be a significant exposure
characterized by either the low, moderate, or high designation.

And that is really at the discretion of the industrial hygienist to discern from the comprehensive review of the information available to them what's the appropriate designation.

And then turning to what Jeff is talking about, yes, the contractor has internal quality control measures that they're trying to align those reports that are being generated based on the historical application of what we do and the process.

Then we have a federal certified industrial hygienist looking at that to make sure that in general the quality of those reports is acceptable for us to process and pay the contractor for the cost of each one those referrals.

And then this process is designed to just frame out and provide information that then gets fed to another expert, a physician looking at that and then trying to interpret that
information in a way that's going to allow that doctor to come along and offer a theory of causality.

And I think the discussion that we've had is very appropriate in that, yes, the issue here is how does the doctor interpret that information?

It's really a matter of the doctor's judgment and interpretation and you get very similar situations which come to very different conclusions, simply because of the expert looking at it.

So, the process is what creates the uniformity in that we allow for this process to work as it is, all the way through this adjudication process.

And then our decision process allows for additional input from claimants or their advocates or other experts that want to weigh in on these things to try to get to an ultimate outcome that everybody can maybe agree on.

So, yes, that's where you get the
differences of opinion that say this is going to be the challenge here, the different variables that have been looked at by experts.

CHAIR MARKOWITZ: I'm sorry, I missed that. What's the definition of significance?

MR. VANCE: If you go to the procedure manual, it breaks it into two different categorizations.

Incidental, which is just from my understanding and I'll let Jeff chime in too here, industrial hygienist will never say that you had no exposure but what you will say is the lowest threshold of exposure that they can reasonably assign is incidental, it uses the world incidental in passing only.

If the exposure in their opinion is above that level, then it's significant and they would assign the low, moderate, or high, and I think they used different kinds of characterizations.

But it's basically those three tiers of significance. So, look at it first as did
this person have anything above an incidental exposure. If the answer is yes then it's significant, low, high, or moderate, however they do it.

Jeff, do you have any additional thoughts on that?

MR. KOTSCH: That's great.

Basically, the dichotomy is either incidental, essentially in passing only, like when you fuel up your car, that exposure to the gasoline vapors is incidental, you're not doing that eight hours a day.

And then the rest we consider significant with the gradation of low, moderate, or high. And then the different frequencies, essentially.

You're right, obviously the definition of significance to us may be different to what it is to a toxicologist or an epidemiologist or a physician.

CHAIR MARKOWITZ: And just to close out these questions, this is the language that's
included in a lot of the reports since February 2022. We asked for some examples from some claims, some excerpts from some claims about, actually, where the regulatory limits were exceeded.

And you provided four and one I couldn't find where it said it actually exceeded the regulatory levels. The other three, it exceeded it for one day.

As you said before, the monitoring was done around incidents, accidents, and those are relatively brief.

That's when monitoring was done and found at high levels. As I said before, one day of exposure isn't going to impress most CMCs in terms of chronic diseases but those were the examples you were able to provide.

I don't review that many claims and I've never seen a claim in which there was ongoing industrial hygiene sampling that demonstrated ongoing exposure of any level.

I take it it probably doesn't exist or
it doesn't exist very much.

MR. KOTSCH: Obviously, we don't see chronic monitoring results that are results of chronic monitoring above the regulatory limits. We're not seeing that or at least we haven't been provided with that.

That doesn't mean it doesn't happen but I would think in the current regulatory climate of, say, the mid-1990s, those types of things would obviously be frowned upon and situationally corrected to bring those levels back into compliance.

You're right, an acute exposure one day is obviously not a major contributor probably to a chronic condition.

CHAIR MARKOWITZ: Except for the World Trade Center, but we'll leave that alone. Board Members, any questions or comments?

MEMBER WHITTEN: This is Dianne Whitten, I just have a comment. Can you guys hear me? I have trouble with my speaker.

I just feel like the statements that
the Department of Labor is making on these claims assumes there was constant monitoring and caution taken around the employees, and that's just not true.

34 years out here, I've never had an IH check, sample, or monitor the jobs that I was on until 2010. There was nobody there when I was standing in primary coolant water on the back of the reactor monitoring the chemicals, and this was in the mid-1990s.

There was nobody there monitoring me when I was lowered into a pink farm pit valve, there was no monitoring, and that was in the late 1990s. I think you're just assuming much on the monitoring side.

That's all I had to say.

CHAIR MARKOWITZ: Other comments?

MEMBER KEY: Jim Key here. I agree with Ms. Whitten's comments, particularly one review of some claims that have been denied.

The IH portion of the report or the denial refers to claims of inventory of certain
chemicals on site that they found either by the contract's purchasing reference or whatever.

But it's a fallacy because what actually happens with these locations, if you have a chemical that is suddenly outlawed, let's take TCE, and the contractor is then advised to find a more worker-friendly, less hazardous chemical to utilize, that doesn't mean that contractor at that site went around and collected all of that particular chemical that had been outlawed and took that out of operation.

The ambulatory at those sites will continue to be used up and beyond whatever deadline of removal or outlaw of the chemical occurred until the inventory was depleted.

As Ms. Whitten said, and others have, as we look back at Subpart E and how FECs were set up, a lot of those were set up on the basis of there was no documentation of exposure to workers.

And I think the same should hold true for Subpart E. There was no monitoring done on
any job sites up until the late 1990s, early 2000.

Every day exposure to TCE or to other chemicals occurred on a routine basis and it seems like some of these contract IHs that are brought in to review these claims have no knowledge of the work site whatsoever.

After a denial has been given, we have even had affidavits filled out by coworkers, 20 to 30 coworkers, bracing the historic knowledge of exactly what occurred at these sites.

And I don't see that those affidavits prove or were even considered in a reconsideration of a claim. That's the end of my comment.

MEMBER TEBAY: This is Calin Tebay, I have one last comment. To follow up with what Diane said, very rarely do we have personal monitoring devices, they're area monitoring devices.

So, I'm just going back to this IH report, what they have for data to base their
assessment on, the information does not exist for them to say you were guaranteed exposure this day on this job.

But I will say some of these IH reports in their professional opinion have also included that there is no evidence that the individual engaged in any activities that would have put them in a position for potential exposure when that IH has absolutely no basis for that comment.

Because they don't understand or they are not educated and don't understand the work processes at these sites. So, broken record here, I'm back to the same complaint.

I get there's a lack of information, a lack of data for that IH, I get that there's a lack of records.

I understand that they're working with not much information but when we say they're just providing professional opinions, it's gone beyond that and the way it's being communicated as Mr. Van Dyke said earlier, is it draws this
conclusion that there's no significant exposure, it is incidental at best.

If it is significant it's low, and being it's lower in significance means there can be no chronic illness. And none of that is true.

So, I think there needs to be a little bit of an education process or a rework to your IH procedures so they don't just draw these conclusions. For anything that's not FEC, it's like a guaranteed denial.

So, I hope we can take this conversation and use it to improve the procedure.

CHAIR MARKOWITZ: Any other comments?

MEMBER SILVER: This is Ken Silver. One of the cardinal sins of evaluating and managing risks in the government and elsewhere is to decide on a desired policy outcome and then find facts to support that outcome.

I'm going to keep an open mind and not rush to judgment that's what's going on here. I'll entertain the hypothesis which you gentlemen have asserted that in the era since 1995, DOE
sites look to ACGIH standards or guidelines.

And what about immediately preceding it, which I would bound from the early 1970s, when OSHA was finding its legs, until the mid-1990s. Would you assert that in that earlier era as well DOE cites preferentially looked to ACGIH guidelines over OSHA standards?

MR. KOTSCH: I don't know the answer to that. We have to look at that. I'm not going to speak to that. I'm not quite sure if they were doing the OSHA standards or the other ones.

MEMBER SILVER: I think the context from our standpoint is that it was an attempt by the program to try to respond to some input from the Board in the past or conversation about the Board, trying to provide more context of what that, within regulatory limits, phrase meant.

And so because we're looking at OSHA in the mid-1990s, this is what we were looking at because it's always been the position of the Agency that at some point there was a really
concerted effort by the Department of Energy to make this a much more serious effort on their part to protect worker health.

Prior to that time, that didn't exist so we have a much more open to interpretation kind of view that the industrial hygienists are going to assume there was not that type of structure that was in place so they're more free to look at potential exposures above what would normally be considered the safe threshold.

So, this is the challenge right here, if that's not the acceptable language or the acceptable context to frame it, what would be the alternative viewpoint in the absence of definitive sampling data?

That's the struggle. So, I think we don't have really an answer for you on that.

All we're looking at in response to this particular topic or the post-1990s is this is the rationale that our industrial hygiene team came up with to explain that phrase.

Smack dab in the middle of the 1990s
the mission at a lot of DOE sites switched over from production to environmental remediation and the predominant model for training workers was the OSHA HAZWOPER standard.

It's often said you can't step site on this DOE or any other hazardous waste sites unless you've heard HAZWOPER training.

So, for the surging hazardous waste remediation workforce, we do assert that after 1995, the safety technicians and the occasional IH working for those cleanup contractors looked at ACGIH TLVs rather than OSHA PELs.

That would be a logical extension of what you're claiming.

MR. KOTSCH: We considered those. I think the IHs would consider the ACGIH numbers generally to be more restrictive.

MEMBER SILVER: It's certainly challenging.

But if I were to get my hands on the old Tiger Team reports circa 1990, you'd expect to find more references to OSHA limits or more
references to ACGIH limits looking backwards from 1990.

MR. KOTSCH: That, I don't know. Like you said, you'd have to look at them. Obviously, the Tiger Teams were the impetus for a lot of things, both on the RADCOM side and the rest of the safety programs.

MEMBER SILVER: One last thing about contractor records, I had an experience right after Energy Secretary Hazel O'Leary said that she had worked out an agreement with the University of California, which is three DOE sites, over ownership of record.

For a long time UC claimed that if they created a record, they owned it and that was causing a whole lot of trouble in the era of contemplating the former work program and looking at past illnesses.

A FOIA officer out of Albuquerque tried to explain records missing from monitoring reports, stacked monitoring reports, on the wacky assumption that maybe the missing pages were
owned by the University of California and the pages they gave me were still owned by DOE.

So, has the contractor ownership issue really been solved and is it at all possible that contractors hold on to the incriminating results and just leave behind a token amount of uninteresting records under the ownership of DOE?

I documented that in a letter to the editor of Environmental Health Perspectives. I'm not making it up for this. Anyway, those are my thoughts.

CHAIR MARKOWITZ: Thank you. If there are no other comments, I want to thank Mr. Kotsch and Mr. Vance for straightforward answers to these questions, very interesting, very illuminating, so thanks a lot.

We're going to take a break until 3:13 p.m. and we'll come back and review some more claims. Thanks.

MR. KOTSCH: Thank you for your time.

MR. VANCE: Thank you very much.

(Whereupon, the above-entitled matter
went off the record at 2:57 p.m. and resumed at 3:14 p.m.)

CHAIR MARKOWITZ: Back to review of claims, we'll go until 4:00 p.m., we're not going to be able to do all of the claims but that's okay. Claim 2282, it's a chronic lung disease reviewed by Dr. Key and Mr. Friedman-Jiminez.

Have we done that, 2282?

MEMBER FRIEDMAN-JIMENEZ: We didn't discuss it.

CHAIR MARKOWITZ: Let's discuss it and then after 2282 we're going to do, a heads-up for Ms. Pope and Mr. Tebay, 2347. First, we're going to do 2282 and then 2347.

MEMBER FRIEDMAN-JIMENEZ: Are we going to do 8472, Parkinson's Disease?

CHAIR MARKOWITZ: Yes, we are. Let's go.

MEMBER FRIEDMAN-JIMENEZ: 2282, Mr. Key, would you like to start or should I start?

MEMBER KEY: No, sir, go ahead and start.
MEMBER FRIEDMAN-JIMENEZ: I think this is a very quick case. I agreed with the decision, this is a man that worked for six months, got COPD, is a smoker, and the exposure considered was asbestos exposure, which he likely had some.

He was an electrician who was tearing out some ventilation ducts for part of those six months.

I think the asbestos standard is reasonably protective for COPD and asbestosis and his brief exposure period, and the very likely lack of violation of the OSHA or ACGIH standard for asbestos make the likelihood of his being exposed at a sufficient level to cause COPD very low.

So, I have no criticism of this case, I just did think the IH report should have discussed the work activity of disassembling HVAC ducts but the exposure was likely to be so brief and probably fairly low, and unlikely to have been the cause of his COPD.
So, I agreed with the conclusion and I didn't think there's much to discuss.

CHAIR MARKOWITZ: Thank you. Mr. Key?

MEMBER KEY: I have no additional comments.

CHAIR MARKOWITZ: Great, we're going to move on to 2347, it's Ms. Pope and Mr. Tebay. Just while they're bringing it up, on the on-deck circle is 6463, it's a chronic lung disease, Ms. Whitten and Dr. Bowman.

First, we will do 2347 and then we will go to 6463. Duronda, do you want to go first?

MEMBER POPE: I'd rather you go first, I'm getting my notes together.

MEMBER TEBAY: I'll go first, although I think I probably agree with the outcome. It seems there was a lack of diagnosis.

I would say that for the claimed condition, although there was a second condition for chronic lung disease, the individual had identified specific exposures that they may have
incurred during their employment.

I think the SEM search was decent, I think it didn't agree with all those exposures but it also identified some additional exposures.

On the other hand, once again, you're going to hear the same from me, you're going to go back to the IH where that's confusing communication from the IH on the word incidental versus significant versus low.

I don't understand. I kind of understand it but I don't agree with the language.

Although the IH I think did a very detailed assessment, you passed that to the CMC and it kind of draws a conclusion, and although I do agree the CMC's conclusion is very detailed, I think they both did their jobs.

I think we're stuck in that lack of -- and that's what I'm going to go back to -- every single exposure that was identified in this claim and every paragraph where the CMC identified the potential exposure, it also states there's no
evidence to support there was any exposure.

There's no record, there's no evidence, there's no evidence the individual engaged in any of those activities or had use of those potential or significant exposures.

And therefore, the exposures would not have exceeded existing regulatory standards. Although I'm okay with the quality and the general claim itself, I'm going to fault back to the CMC and the IH.

I don't think it really paints the correct picture.

CHAIR MARKOWITZ: Thank you. Ms. Pope?

MEMBER POPE: Yes, I agree with Mr. Tebay. In this case, it is complete information in my opinion that it jumps to the absence of curtailing data contrary to the highly unlikely.

And then it states that it wasn't enough evidence to support or necessary to develop the claim. I think a lot of that goes on in a lot of these cases that states that they
identify that the condition exists but there's no evidence to support it.

And so it just goes back to when we initially identified this language issue within the cases back in the early days of 2016 of the Board. We identified these same issues about this language that jumps back and forth.

Even though it's highly worded to say that they do identify that this particular claimant does have these aggravating illnesses, would they still go back to this highly unlikely that you were exposed to that?

Sometimes that's offensive to me because I feel like the IH or the CE don't really have the knowledge of how these sites operated.

A lot of times in the job category like an RCT, like an operator, chemical operator, like I myself was, and a lab technician, there's a lot of times that we moved around and a lot of times in these areas that we were exposed to.

They had no education about how these sites really operated and to draw a conclusion
that it was highly unlikely that you were exposed to these types of chemicals or exposure.

Sometimes it's offensive.

CHAIR MARKOWITZ: Okay, thank you. So, you think the IH got it wrong, basically?

MEMBER POPE: Yes.

MEMBER TEBAY: And I'm with Duronda.

In a sense I think the IH got it wrong but if you read it, from what you experience it's fast. He didn't have any supporting evidence, he didn't have any documentation to determine there was any sort of exposure.

But in the way it's communicated, and I don't understand why they would add the fact that during this time, his exposures would not have exceeded existing regulatory standards.

There is no basis for that. What he can say is he wasn't provided any evidence. In his professional opinion, he can provide the causation or the potential and several other things.

But there are statements in there are
that are not facts and that's what makes it wrong.

CHAIR MARKOWITZ: Thank you.

Let's move on to 6463. It's Ms. Whitten and Dr. Bowman and it's chronic lung disease and after that one, we're going to move on to Mr. Catlin and Dr. Milkulski for a cancer case, 7539.

So, first we'll do 6463 and then 7539.

MEMBER WHITTEN: This is Dianne. I worked for a clerk for 10 years in Y12 --

COURT REPORTER: I'm sorry to interrupt, this is the court reporter. Your mic is not coming through clearly.

MEMBER WHITTEN: I know, I don't know why. Can you hear me now?

CHAIR MARKOWITZ: Yes.

MEMBER WHITTEN: Just let me know if I break up again.

This woman in her 70s, she went in for normal worker physical even though she states that she's in excellent health. They determined
that she had COPD so they geared her towards the program.

        They filed a claim. IH, because of her smoking and her exposure to asbestos, she was accepted under COPD.

        CHAIR MARKOWITZ: Are you finished? You're not coming entirely through.

        MEMBER WHITTEN: I just find it remarkable that this IH took into consideration her smoking and her possible low-level asbestos exposure would have caused her COPD. The other claims where there are the same circumstances and they're denied.

        CHAIR MARKOWITZ: This was an accepted claim?

        MEMBER WHITTEN: Yes, this was an accepted claim.

        CHAIR MARKOWITZ: Dr. Bowman?

        MEMBER BOWMAN: Yes, I can add a bit to that, am I coming through clearly?

        CHAIR MARKOWITZ: Yes.

        MEMBER BOWMAN: I'll just confirm this
was an accepted claim for chronic lung disease. I find it very interesting looking through this.

The criteria we're given in the decision letter, there's one criteria that was not met which relates to latency, in which the diagnosis should be made at least 20 years after the initial exposure during the covered employment.

It was noted that because it didn't meet this criteria, additional development was undertaken to determine if there was scientific merit to a link between the accepted diagnosis of COPD, there's no doubt about that diagnosis, and potential exposure to toxic substances.

They use the appropriate next-steps, the SCM was consulted, the IH was consulted, CMC was consulted. SCM failed to provide a link between the position of this individual, the current position, and the location of the position and toxic substances to COPD.

Despite that, the IH opined that there was likely exposure and ranged from very low to
low levels.

The CMC's review then took into account the low-level tobacco use as well as the low-level asbestos exposure and opined that it was at least as likely as not that it was caused.

So, despite the fact that there are some evidence against what would be considered for acceptance, the cumulative evidence here was weighted with both the IH, despite the very low levels and the CMC saying that there is reasonable evidence that it could have contributed substantially to the chronic lung disease, that the overall decision was to accept.

When I was reading through this at first, I thought for sure it would be denied despite the criteria.

So, it seemed to me in this case different than many of the cases of IH we've been talking about today and yesterday where, despite statements of very low to low exposures and uncertainty and the SCM not coming through, the CMC in this case appears to have given due
consideration to the potential risks of asbestos exposure and contribution to the lung disease leading to the decision in this particular case.

CHAIR MARKOWITZ: Interesting, thank you.

Next we're going to do 7539, that's Mr. Catlin and Dr. Milkulski, and then after that we're going to move to Parkinson's E472, that's Dr. Friedman-Jiminez and Dr. Silver.

So, 7539, it's a cancer case, Mr. Catlin and Dr. Milkulski.

MEMBER MIKULSKI: Catlin, do you want to start?

MEMBER CATLIN: Why don't you start, Dr. Milkulski since there's more medical than exposure assessment in this one.

MEMBER MIKULSKI: This is a breast cancer case claim for a 68-year-old female worker from Savannah, River Site who worked for a total of 13 years is a painter in construction, janitor, and photographer.

This claim was processed under
Subtitle B with a probability of causation of 17.95 percent subsequently denied and submitted subsequently due to the morphological picture of the breast cancer.

It's very similar to salivary gland cancer, that's a salivary gland cancer claim. This was also denied.

The benefit of the worker, the breast cancer claim was eventually reopened given the new specific exposure for designation at Savannah River Site that included the years and the job that the worker worked onsite.

In general, I do not have any issues with this claim. This was processed before the Board's recommendation to include the IR Class 2A chemicals in the SEM.

So, upon the search for exposures related to breast cancer, that provided no input. Other than that, like I said, this is a reopened claim that will be processed hopefully soon.

This is the last few months.

CHAIR MARKOWITZ: Okay. Mr. Catlin?
MEMBER CATLIN: Thank you, Dr. Milkulski for that. I think that really was the case. The part I found maybe of interest to our board was that the SEM review found no link to breast cancer and any chemical exposures.

I just know that certainly the history of painting and exposure the claimant had in the past back in the 1970s to mid 1980s, and the IR designation is painting is a carcinogenic trait back in 1989.

And certainly there seems to be growing evidence that there seems to be some links between some of these exposures and painting. But that just shut down the whole investigation in this case.

So, I'm not sure how we addressed that. It seemed the process would allow for some investigation. Even though the SEM didn't identify any problems, the scope could have been looked at.

So, it might be something we discuss how to handle some of these cases where the SEM
might not be up to date.

CHAIR MARKOWITZ: Other comments?

Next we have 8472, it's a Parkinson's Disease case with Dr. Silver and Dr. Friedman-Jiminez.

MEMBER SILVER: George, are you okay starting the ball rolling?

MEMBER FRIEDMAN-JIMENEZ: Sure, I can cut to the chase on this and if I miss anything I'm sure you can fill it in.

This is a 78-year-old man who worked as a maintenance machinist, mechanical technician, plant maintenance technician, an assembly machinist from 1974 to 1978.

And as a tech liaison specialist mechanical technician from 1978 to 1993 at Los Alamos and Lawrence Berkeley National Labs. He was diagnosed with Parkinson's Disease in 2017, although he may have had symptoms several years before that, before the diagnosis.

The claim was denied based on judgment by the CMC of too-long a latency period for stainless steel and carbon steel, and the
judgment by the toxicologist that the literature in 2018 did not support a causal relationship between trichloroethylene, which I'll call TCE exposure, and Parkinson's Disease.

So, the IH report and the CMC report maybe as a result of the toxicology report did not discuss TCE exposure. And I think I disagree with the denial, although I think it needs to be reconsidered.

I may have missed something but it seems to illustrate a problem in the way the system is set up. And I'll try and lay it out in a way that may be discussable and actionable.

But it seems to me that the question to the CMC, which was framed by the claims examiner, was based on the IH and toxicologist's focus on bronze, stainless steel, and carbon steel, and the toxicologist's judgment that TCE was not causally related to Parkinson's in the literature.

The way that question was framed I think may have misled the CMC evaluation.
In spite of the statement that was submitted by the claimant and a letter from the treating physician stating that TCE had been linked to Parkinson's Disease, citing a well done study from 2012 six years before the claim was evaluated, somehow the industrial hygienist and the CMC and the toxicologist and the Department of Labor all focused incorrectly on carbon steel and stainless steel without investigating manganese content of the steel, which was something that I thought was completely ignored that should have been discussed.

And they failed to identify TCE as a likely causal agent. So, I think the problem here is the focus seems to have been driven by a too-narrow question that was framed by the claims examiner that did not include TCE in the initial evaluation.

The CMC who was an M.D.-Ph.D.-neurologist would likely have been aware of the study which was done by Samuel Goldman and was a twin study.
It was a well done study criticized by Chekaway for being too small but Chekaway didn't give any cogent real criticism of it.

And the study by Goldman actually recorded an odds ratio of 6 and a lower than 95 percent confidence interval of 1.2 for the association between TCE and Parkinson's Disease.

And the lower confidence interval was reasonably far from the middle value of 1 so that really doesn't support Chekaway's criticism of the study that the study was too small.

Chekaway didn't have any other criticism. It seems to me as an epidemiologist that it's unlikely with an odds ratio of 6 that confounding by other causes of Parkinson's Disease would have explained the entire association.

And the small sample size again is not really a problem since the confidence interval clearly excludes one.

I think there was more discussion really needed on why this study was dismissed and
why it was not considered important by the toxicologist who pretty cavalierly dismissed TCE as a possible cause of Parkinson's.

So, the problem here I think is this oversight that the too-narrow question that was framed by the claims examiner, who either was unaware of the TCE exposure, that TCE exposure was demonstrated in a decent study to be strongly associated with Parkinson's Disease, or for some other reason excluded TCE.

I think that problem illustrates an issue that we should discuss, which is how is the initial question framed?

Who frames it? The claims examiner doesn't likely have either the training or the time to keep up with the literature on all of these possible associations.

And I think, frankly, in some ways it doesn't have the knowledge to really be the ultimate person that frames this question. How the question is stated is quite important to the case.
In this case, it led to the denial and I believe that it may well have been supported and the case approved if TCE had been admitted as a possible cause of Parkinson's and the CMC would then have had to deal with TCE as a possibility, which it did not.

CHAIR MARKOWITZ: I'm going to just ask a question. The Department accepted our recommendation on having TCE as linked to Parkinson's in the SEM in August 2020. Was this case decided before August 2020?

MEMBER FRIEDMAN-JIMENEZ: Yes, it was, then it was not in the SEM at the time the CE framed the question, however, the treating physician cited the Goldman study in her letter and the toxicologist cited the Chekaway paper, which was a review and had included the Goldman paper, and didn't comment on the Goldman paper.

The Goldman paper was an important piece of evidence here that was not discussed and there were several reasons why it should have
been discussed. It had been brought up by two different people.

So, I think the fact that it was not in the SEM does contribute but it's really a question of how is the SEM updated and how are the claims examiner and CMC trained in terms of keeping up to date with the literature.

The study came out in 2012 and it seems to me that an M.D.-Ph.D.-neurologist who is a consultant on this case of Parkinson's Disease should have seen this and should have questioned why is TCE not being considered here?

But they didn't. So, that's the question I'm raising, how is the question framed and should we discuss other possible ways of approaching this?

MEMBER MIKULSKI: George, Steve, this is Marek.

You had a very similar experience from reviewing this claim as me looking at a couple more Parkinson's claims, one with incurment rating, both with different outcomes.
Yes, the Goldman study was the core of our recommendation for presuming the causality of trichloroethylene and the recommendation that the Board issued specifically called for including these as presumptions of causation.

Now, in the response that we have received, DOL called solely on including these as health links, as exposures related and associated with Parkinson's as in SEM.

So, I think another issue that begs the question is how does actually SEM, how do the SEM exposure health effect links translate to the presumptions of causation that are included in the procedure manual?

MEMBER SILVER: That's an excellent point. Can I add just a couple of things?

CHAIR MARKOWITZ: Sure.

MEMBER SILVER: There was muddiness about his job title and his tasks from the minute he walked into the resource center, and he did the OHQ.

He said he worked at the Meson
facility, someone knowledgeable at the site would have known that the Los Alamos Meson, M-E-S-O-N, Physics Facility, the linear accelerator, 2600 feet long.

But it was spelled M-A-S-O-N and the picture was laid down that he built accelerators. In fact, people in his job category of electromechanical technician were assigned to clean miles and miles of bean line for the accelerator with trichloroethylene.

An excellent description is in the claim file of Ben Ortiz, who I've mentioned many times, who developed solvent cephalopathy. The final decision came through with an excerpt from the SEM for, quote, unquote, maintenance technician at Lawrence Berkeley for two years.

But in fact, his job title was maintenance machinist. Maintenance technician at Lawrence Berkeley has zero exposures, maintenance machinist has a long, long list of exposures.

And when I checked it Sunday night, there was a direct disease linkage for manganese
in his very building, Building 77. So, this claim was decided in 2018.

After the report, the SEM has been updated but too late for him unless the program leadership takes a look at it.

Also in his claim files was a hazard inventory provided by Lawrence Berkeley management in the 1980s as they were preparing for CARA compliance, which listed additional exposures that still aren't in the SEM in his building including carbon monoxide as the welding byproduct, which DOL recognizes as the causal contributing factor for Parkinson's Disease.

So, it was kind of shooting fish in a barrel on the job title exposure site of this claim. I really would like them to take another look. And Monel stainless steel contains up to two percent manganese.

MEMBER CATLIN: This is Mark Catlin, can you all clarify, the TCE report from 2012 was provided by the claimant's physician in that regard? Is that the case?
MEMBER FRIEDMAN-JIMENEZ: The Goldman study was published in 2012 and was cited by the treating physician in her letter supporting the claim for Parkinson's Disease and TCE exposure, however, TCE was not considered formally in the evaluation.

MEMBER CATLIN: I appreciate that.

I guess what I'm hearing again here in this case, and I've heard a couple others, where claimants are encouraged to provide additional information to help with the case but it seems that often, that information is either ignored or not addressed.

If they're going to ignore this, then there should be some place in the CMC or some report that says here's why we're not considering this.

And I think we heard earlier that there were coworker testimonies that were provided that were ignored in another case.

So, this seemed to be a really important core feature of this claims management
that if there is information provided, it should be at least acknowledged and then dealt with, plus or minus, so that then there's a chance to review that.

In these cases, they seem to just disappear.

MEMBER SILVER: My impression is that the very concerned primary care doctor of above-average competence searched PubMed and the Goldman Study was one of three or four abstracts provided.

But the opinion didn't really rise to the level that we've seen in some other cases where the worker was lucky enough to have a specialist in occupational medicine write a more detailed opinion letter.

They should still honor what the primary care doctor came up with but that could be the difference.

CHAIR MARKOWITZ: Let's do one final case, also Parkinson's Disease, it's 7904, it's got Duronda Pope and Mark Catlin's name on it.
They're the reviewers. 7904, also Parkinson's Disease.

MEMBER CATLIN: And my apologies, I actually was not able to review that. By the time I was able to get to the disk and it was corrupted, I have not been able to look at that. My apologies.

If Duronda wants to give her opinion, I'd be really interested to hear it.

MEMBER POPE: Thank you, Mr. Catlin, for that. I'm sorry that you weren't able to look at that. After reviewing this, this is an accepted case.

This claimant was a security guard and the claim, like I said, was accepted but here we go with this language of identifying that yielding and saying that it is highly likely that the lead exposure of occupational exposure was high-level range.

But I don't think I really had any problem with this case other than just looking at the fact that he was a security guard and the
security guards at my plant went everywhere.

So, they were potentially exposed to a lot of things but this particular claim did have support in regard to supporting documents that helped develop the case and was able to be accepted.

So, I didn't have any problems with that so I just wanted to reiterate the fact that having this assumption from some of the IH and the CMCs and also the CE's of that job category as an RCT, as a security guard, their potential for exposure is really high.

CHAIR MARKOWITZ: We have time for one more case so let's bring back Mr. Silver and Mr. Tebay for cancer case 7855. It's 7855. Mr. Silver and Mr. Tebay?

MEMBER TEBAY: Dr. Silver, you go first. I'm punting.

MEMBER SILVER: I'm skimming really fast.

CHAIR MARKOWITZ: 1000 pages, good luck with that.
MEMBER SILVER: No, my notes, just turbo-charge my memory with his job title and location. Oak Ridge was mostly discussed as a clerk throughout this claim file.

He had prostate cancer, asthma, and squamous cell carcinoma of the ear. He got a very low probability of causation for the prostate cancer from NIOSH, less than 2 percent if I remember correctly.

The asthma is not our main focus. He had job tasks described on the Atomic Trades Labor Council Worker Screening Program questionnaire that were a lot dirtier than just being a records clerk.

He was an assembly auditor and described being in a particular building, 9212, with highly enriched uranium operations when components were being taken apart and maintained.

And his cancer claim was denied but when I looked at the latest SEM for that building location, mineral oil is one of the potential exposures in the very building location.
And mineral oil is a recognized cause of skin cancer. So, I don't know when that update occurred. He would have to peel, I think, argue that he wasn't just a records clerk, that he was involved in quality assurance.

And that job title at that location produces an exposure to mineral oil which was missed. And on his EE1 he said he was exposed to a lot of chemicals.

CHAIR MARKOWITZ: Mr. Tebay?

MEMBER TEBAY: I'm good with that. I also see there seem to be several places where I think the CMC, the claims examiner, and maybe the diagnosis physician kind of did not agree that there was a clear diagnosis.

Does that make sense?

MEMBER SILVER: I think that was the case for the asthma.

MEMBER TEBAY: I agree with everything Dr. Silver said.

MEMBER SILVER: You're saying it's kind of hard to be ambiguous about a diagnosis of
cancer?

MEMBER TEBAY: Yes.

MEMBER SILVER: But he lost his low radiation dose on prostate and I think maybe he was a victim of an outdated SEM.

MEMBER TEBAY: I think that's probably true and there was also more IH language in there that creates confusion.

CHAIR MARKOWITZ: Other comments? Thank you.

We've completed I think 19 or 20 out of the 24 claims, so that's pretty good. We're going to move now to the next agenda item which is being brought up by Mr. Tebay, which is the issue of beryllium sensitivity.

And maybe, Mr. Tebay, you should just introduce the topic.

After you do that, I do want to go back to 2017 when the Board tried to take on this issue and what we requested and what the response was, but we can do that after you raised the issue.
MEMBER TEBAY: You can do that now, it doesn't matter to me.

CHAIR MARKOWITZ: Kevin, do you want to bring up that? This problem with the borderlines, beryllium at the site for expiration testing, has been around for a while, and it's been studied multiple times.

No, not that one, the other one that I sent you.

MR. BIRD: The one you sent me most recently?

CHAIR MARKOWITZ: No, not the most recent, that's a three-lined one.

MS. RHOADS: Should be the one that I sent you this morning, Kevin.

CHAIR MARKOWITZ: So, let me begin to talk about it. What we're going to be seeing is the Recommendation No. 6 from the Board, I think 2017.

And we recommended that the finding of two borderline beryllium sensitivities in the proliferations test should be considered -- There
we go. Okay. -- considered the equivalent of one times the BeLPT for the purpose of claimants' adjudication under Subpart D and EEOICPA.

In other words, if a person has a positive, has two positives, two borderline BeLPT, that would be the same as having one positive BeLPT. And the program would recognize it as, as having sensitivities eligible for compensation and treatment.

And the response from the program was that they did not support this change. And reading from the first line of their response: "This recommendation is inconsistent with the explicit statutory requirement that beryllium sensitivity is 'established by an abnormal BeLPT' performed on either blood or lung live cells."

And what they end the paragraph by saying is that the program is "bound by specific, clear, and unambiguous language of the governing statute."

So, that's the, that's the problem we ran into before. So, and apparently it continues
to be a problem. And the program, as I recall, the program was unsympathetic to both the issue and the Board's recommendation.

It's just that there, that the plain text of the statute ties their hands into saying it needed a positive, an abnormal beryllium lymphocyte proliferation test.

So, where do we go from here?

MEMBER TEBAY: So, can somebody explain to me, Mr. Vance, somebody, explain to me what that means? I mean, I guess the governing statute doesn't allow change to that depth of sensitization?

MR. VANCE: Yeah, this is John.

So, yeah, I mean, if you're looking at that, that was actually, you know, that's a legislative language that you'll see right there in front of you. And so, the program has no sway in changing legal standards that exist.

And so, when Congress passed this and it was signed into law, this is the language that exists. And so, the program is administratively
bound to ensure that claims satisfy the standard which specifically says that you need to presume an abnormal BeLPT.

Now, you know, I agree that that might not be the most appropriate standard to apply now. But that is neither here nor there. That's the language that exists in the legislation and that's what the program's legally responsible for applying in case adjudication.

And so this, this language exists in the statute. This is the language the program has to apply. So, it has to be an abnormal test result.

We have no say in this. And the only time or the only option that you would have would be to have the United States Congress pass an alternative law that provides for a different standard.

MEMBER TEBAY: So, I understand that. But I'm a little puzzled because obviously this law was passed, and several of the others for the rest of the procedures. If the criteria changes
and evolves, the technology and medical advancement, how do we live with this? What do we do about that is my question?

I keep hearing we can't do anything about it. But we also can't be expected to live to a standard that's outdated.

MR. VANCE: Well, my response to that would be, unfortunately we live to that standard until the United States Congress decides to change the standard.

And that's, I mean, it's not that I'm sympathetic to every individual who was on the public comments talking about this yesterday. I agree that this could be something to be looked at. But the program's bound by the statutory language.

MEMBER TEBAY: So, --

MEMBER FRIEDMAN-JIMENEZ: This is George Friedman-Jimenez. I have a comment on this.

This is not the first time that we see legislation equate a test result with a
diagnosis. And, in essence, this is a problem of legislators practicing medicine without a license.

We have in medicine -- and I've taught diagnostic testing to 3,000 NYU medical students over 20 years. This is one of my areas of expertise. Test results are not absolute. All diagnoses are probabilistic in medicine. And it requires a clinician to make a decision, a judgment usually, on whether the diagnosis holds or not based on all available evidence, which includes physical exam, diagnostic test results, imaging, and other things.

And in this case the positive test result is equated with berylliosis, or chronic beryllium disease, or beryllium sensitization. That's really a clinical judgment.

And I really feel strongly that this is out of place. You know, I know we can't change the law, but this is really out of place that the legislators are trying to make a diagnosis based on a test result without the
clinical considerations that are required in every patient, with every diagnosis.

CHAIR MARKOWITZ: So, you know, just to follow up here, Congress, you know, they sometimes pass laws, and they sometimes get the details incorrect or incomplete. And I understand that they go back, not unusually, they go back and they, they make amendments to either correct or add to the act in order to make it work better.

And so, I have a little bit of an out-of-the-box idea, Kevin, that you could bring up a draft recommendation, which is that the Board recommends to the Department that they consider -- you can make it larger -- and that they consider asking Congress to make a technical amendment of the act, recognizing that individuals who have or have had exposure to beryllium while working at DOE, and who have multiple borderline BeLPT tests, that they have beryllium sensitivity.

So, it's very focused on a particular
erroneous or outdated notion about what constitutes beryllium sensitivity. It wouldn't require, won't require an act of Congress so to speak, or actually. But, in fact, it's very limited language that they do not now.

I don't know, Mr. Vance, whether the Board is stepping out of its role here. But on the other hand, it's a recommendation that highlights a problem for which there is a pretty easy fix. And whether the Department ever actually does such a thing, informs, or requests, or whatever the proper action vis-a-vis Congress is not something I would know about.

But I think this would certainly express the Board's interest. And, also, it provides a pretty straightforward and highly justified answer to the problem.

MEMBER TEBAY: I do have another question. And maybe this helps.

But, Mr. Vance, under -- in the procedure manual under beryllium sensitivity, under evaluation it talks about the borderline.
But right below that it says the borderline is not sufficient. Below that it says a CE does not intend to interpret the findings of the BeLPT or the beryllium patch test.

Yet, there's a caveat that says if the test is not accompanied by a physician's interpretation, the CE obtains the interpretation from the physician who performed the test.

So, is that caveat, does that open the window that the diagnosing physician can provide interpretation that those borderlines equate to an abnormal?

MR. VANCE: I mean, I, my response to that would be, you know, we would have to look at the specific information submitted. But it would have to be, you know, interpreted or evaluated as an abnormal test result because that's what the statute would require.

MEMBER TEBAY: Okay.

MR. VANCE: So, so that's the answer I'm going to give it. It would have to meet that statutory requirement that it's going, that's it
evaluated as an abnormal BeLPT test result.

MR. CHANCE: Steven, if I may, to your point about traditionally the role of the executive branch is not to lobby Congress. So, I don't know that the Department -- I think you might be getting a little out of, out of your role here.

You know, if this is something you want to do, and like John says, you want the statute amended, there might be other ways you could go about doing that. Because, like, I'm not sure that the Department would be able to lobby Congress.

MEMBER TEBAY: Yeah, obviously not my area of experience.

MR. CHANCE: Yes.

MEMBER TEBAY: I didn't know whether there was some mechanism whereby the executive branch could provide some feedback about the difficulty or challenge in executing a law for which, you know, for which there was some specific, frankly, incorrect --
MR. CHANCE: It's a sticky, it's a sticky wicket.

And, you know, in my own, you know, in my own program we see things that we wish we could change. But, you know, so, I don't know, I think that there might be other ways that you might be able to go about bringing this to their attention. And there are members that are, that are interested in the programs.

MEMBER TEBAY: Right, right. So --

MEMBER CATLIN: Pardon me. Steven, I just wondered if would it be within our bounds as a board to just make the general recommendation that Congress -- not ask the Department to do it, but just a general recommendation that Congress should make this technical amendment to it?

MR. CHANCE: Yeah, I think you could make any recommendation you deemed necessary. I'm just trying to say that the Department probably wouldn't be able to do anything with it. But that could at least get the issue out there.

MR. VANCE: Yeah. This is John.
I agree. I would agree with Mike. But I also see Dr. Markowitz' position that a formal recommendation of the Board does raise the profile of an issue that has come before the Board, even if the Department of Labor may not be in a position to do much about it.

MR. CHANCE: Right.

MR. VANCE: So, I don't know if that makes sense.

MR. CHANCE: I think that's a legitimate point, John. I think that, you know, that you could raise it. I'm just trying to, I'm just trying to dampen any kind of enthusiasm that the Department would be able to go do anything with it.

But it would, you know, maybe raise the profile of the issue.

MEMBER FRIEDMAN-JIMENEZ: This is George Friedman-Jimenez. One more comment.

Another way to approach this would be to put together a peer-reviewed paper reviewing the diagnostic test, and making the
recommendation to the test company that they modify their interpretation of the test so that two borderline tests are equivalent to a positive test. And that way it wouldn't require an act of Congress, but it would require a redefinition of an abnormal test by the company that, that does the test.

But it could be done. I think the evidence is probably sufficient to make that argument successfully.

MEMBER TEBAY: Well, can we review the letter from National Jewish, Dr. Markowitz?

CHAIR MARKOWITZ: Sure. And let me, while we're pulling that up, let me say that, George, that would be a very interesting question for National Jewish, since they do a huge volume of beryllium LPT testing.

Now, whether they could be comfortable with reporting out multiple beryllium -- multiple borderline tests as subset, abnormal subset that would meet the current statute.

MEMBER SILVER: Before we go to the
peer-reviewed paper route, I have a crystal clear memory from early 2001. President Clinton signed the original act in October of 2000. And the Office of Workers' Compensation Programs, in the person of Shelby Hallmark, brought to Senator Jeff Bingaman's attention -- he was the lead sponsor, from New Mexico -- a couple of technical glitches.

One was that the act didn't define marriage in a way that was consistent with the other laws that OWCP administers: black Lung, FECA. So, they worked together on a small set of technical amendments.

The reason I remember that is that one of the widows who campaigned hard for the law had only been married 11 months. And when the technical amendments went through, with very little public involvement, she was out.

So, there is a history of, you know, this part of the Department of Labor -- Pete Tursic was at the meeting. I called in as a stakeholder on the phone call. -- to tweaking
laws with technical amendments recommended by the agency.

CHAIR MARKOWITZ: Yeah. So, Kevin, can you pull up the letter from Jewish?

MR. BIRD: Let me know if this is the letter you're looking for because it's listed as the one.

CHAIR MARKOWITZ: No. There, see, it actually has an --

MS. RHOADS: It should be -- it's one of the separate attachments, I think, on the website, like, below this.

MR. BIRD: Yeah. So, this one?

MS. RHOADS: There you go.

CHAIR MARKOWITZ: Yes.

MR. BIRD: Okay.

MEMBER TEBAY: So, this was submitted to, well, with our response. I kind of lobbied this out of National Jewish. But this is somewhat of what Dr. Friedman-Jimenez has already referred to. This is their opinion.

I think we have -- maybe it's not
detailed enough -- but I think we already have that. If we scroll down, you can read that National Jewish in their opinion is it needs multiple borderline equate to beryllium sensitization. Signed by Dr. Meyer and by Dr. Mayer.

I think we skipped right to the back page. But on the front page the first article pretty much, or the first paragraph pretty much thought, you know, and that one does as well.

CHAIR MARKOWITZ: So, they could be asked whether they could legitimately, when there are two or three borderline results, whether they could report that out as abnormal. You know, not --

MEMBER TEBAY: Individual, what you're saying, for each individual person who's diagnosed.

CHAIR MARKOWITZ: Yeah. I mean, not, we're not exploring perception here. We're not asking them to accede for the purposes of compensation. It's a question of what the
nomenclature is.

If they believe that BeLPT borderline results is the same as abnormal, are they comfortable with changing the nomenclature?

MEMBER TEBAY: Yes.

CHAIR MARKOWITZ: I think that's what, I think that's what Dr. Friedman-Jimenez is raising.

MEMBER TEBAY: Yes. And I think that this was our attempt at that. Right? This is the attempt to do that. Although I think that's a temporary fix until the -- until the procedure itself or -- can be changed. Right? I mean, until it's in line with the procedure.

And I don't, for the rest of the Board -- and anybody jump in and ask me any questions at any time -- we've been working on this since 2010. The DOE had a brilliant corrective action plan that went out and lobbied and asked for assistance from every major beryllium vendor, beryllium clinic, you know, certain specialists in their area in beryllium. We created a
simplified algorithm for testing.

And these borderlines have been included.

As soon as, as soon as that was done, Washington State L&I created a guideline for diagnoses, beryllium-related condition and disease, which includes the borderlines. In fact, it is at least two abnormal BeLPTs, one abnormal and one borderline, or three borderlines.

These are all documents that are available on the website, and all documents that I've provided for today's discussion.

Along with OSHA last year came out with a worker information (unintelligible) on beryllium. And under what it means, OSHA defined any, basically that individuals with either two abnormal BeLPT results, an abnormal and a borderline test result, or three borderline rest results are considered to be confirmed positive tests.

There's a pretty consistent criteria
between Labor and industry, OSHA, which is a federal program, National Jewish, Cleveland Clinic's links to this same diagnosis criteria. Our onsite medical provider for Department of Energy uses the same criteria.

But the program itself, because it's kind of crippled by this, you know, law, we've left a lot of workers out there in a really, you know, difficult spot.

CHAIR MARKOWITZ: Yeah, I don't think anybody disagrees with you, actually. It's just a question of finding, finding a solution.

I looked back at one of the studies, the Middleton study that they, or the previous, another study by SANGY (phonetic), where they looked at 20,000 test results from DOE. And they found about 30 of them had three consecutive borderlines.

So, just numerically, just so people understand, it's not a huge problem. I'm not saying it's not important to people and we shouldn't get it right. But just in terms of
does this open the floodgates of a ton of people coming in with beryllium sensitive, the answer is no, because multiple borderlines are just not that common. They should be handled correctly, no question, but just not common.

Of course, if you have it, it is very common because you're one out of one.

MEMBER TEBAY: Yeah. Yeah. You know, we have -- and I'm not excluding the other DOE facility. I have, I have information that was brought to me. And I've been to other facilities that we, that have the same issues.

But here at Hanford we have a significant number of people. And when I say "significant," you know, we have several hundred people in the beryllium condition or disease. And we've seen the borderlines be more common than it used to be.

I don't know why that is. But, obviously, the workers that are identified a beryllium workers are in a surveillance program. Once there's a red flag in their testing, they're
sent to National Jewish. Then National Jewish diagnoses these folks via three borderlines. And then the workers get stuck in this weird spot where they cannot get continued medical surveillance.

Or it may be a continuous effect on their occupation as well.

So, I appreciate everybody acknowledging this.

I would ask, Mr. Vance, is there a potential that the DOL could acknowledge that this is an issue for them and that needs to be resolved? Would that help as well for Congress, Congress to get this fixed?

MR. VANCE: I think that the Department of Labor would respond to any kind of formal recommendation by the Board. That, I think, is (inaudible).

MEMBER TEBAY: Say that again?

MR. VANCE: I think, I think the Department would respond to whatever recommendation that the Board makes.
MEMBER TEBAY: I gotcha.

MR. VANCE: That's as far as I can comment on that.

CHAIR MARKOWITZ: Yeah. And just to amplify, if I could go back to Mr. Chance's comment that even if our recommendation is not actionable from the Department, then at least it provides some visibility of the issue that some individuals, groups, could take to members of Congress and raise, raise the issue and say, you know, this is what we found at our facility but, also, this is why the Board has concerns as well.

MEMBER KEY: So, I have a question related to that, Dr. Markowitz.

Is it illegal for any board member to lobby Congress on changing any of the criteria or making amendments to legislation to correct this issue?

Is it a conflict of interest for a board member to go to Congress on this issue --

(Simultaneous speaking.)

CHAIR MARKOWITZ: You have to ask the
ethics officer from Department of Labor for advice on this, a special government employee. And there are limits.

MR. CHANCE: Yeah, we would have to look into that, Steven. Might be best action is it is, that would be something we would -- shouldn't be done.

But, Carrie, you kind of, have you looked into this?

MS. RHOADS: It should be -- it's one of the separate attachments, I think, on the website, like, below this.

MR. BIRD: Yeah. Yeah. Since you have to certify that you're not a lobbyist to be considered for board members, I'm thinking that the ethics people would say no to this.

But, I mean, as a board member, definitely not.

So, if you want to -- probably we would run that by the ethics people, yes.

CHAIR MARKOWITZ: Well, also, lobbying has a specific definition, specific meaning when
examined as such. It think educating members of Congress about issues is not necessarily lobbying.

MEMBER TEBAY: I think we utilize beryllium awareness for our BeLPT committee, which is obviously not board members, to lobby our, you know, Senator Murray and Senator Cantwell. We can get the ball rolling.

MEMBER KEY: Well, I can also do the same with my singular set of senators from the State of Kentucky. It is the Senate Minority Leader and, also, the cosigner of the EEOICPA legislation.

MEMBER WHITTEN: This is Dianne. Does this fall under our description for duties in our charter?

CHAIR MARKOWITZ: I'm sorry, what specifically are you referring to that's falling, the idea of communicating with members of Congress?

MEMBER WHITTEN: No. It just says medical guidance for claims examiners, claims
under this program with respect to weighing of the medical evidence of claimants.

We report directly to the Secretary of Labor. So, we write him a letter and --

CHAIR MARKOWITZ: I'm sorry, are you speaking in support of the draft recommendation, of that action?

MEMBER WHITTEN: Yes.

CHAIR MARKOWITZ: Okay. Kevin, if you could bring that draft recommendation up and we can see whether we want to address the language, and whether we want a vote on it.

MEMBER WHITTEN: Can I just say that I would change the language to just say a beryllium sensitivity diagnosis, and not, not support the borderline testing there.

CHAIR MARKOWITZ: Is that a Word document, Kevin?

MR. BIRD: Yes, it is. Sorry, sorry. Yes, it is.

CHAIR MARKOWITZ: Okay. So, Ms. Whitten, what do you want, what do you want to
change? What words do you want to change?

MEMBER WHITTEN: So, after "working for DOE" and "you will have a diagnosis of beryllium sensitivity."

CHAIR MARKOWITZ: Okay. Don't, don't remove the old language yet, Kevin. You can just, you know, put it on the next line. That's fine.

So, the problem I think with that proposal is that the multiple borderlines doesn't get you National Jewish, it doesn't get you a diagnosis of beryllium sensitivity. Or does it? That should be in the National Jewish letter.

MEMBER WHITTEN: I don't know. I just don't think we should put ourselves in a corner again with (unintelligible).

CHAIR MARKOWITZ: I'm sorry, I'm looking, I'm looking at the letter.

I'm sorry. So, but it's who has had exposure to beryllium while working for DOE, and has a diagnosis of beryllium sensitivity.

What follows that?
MEMBER WHITTEN: Nothing.

CHAIR MARKOWITZ: No, but --

MEMBER GOLDMAN: This is Rose Goldman.

The thing is that the beryllium sensitivity is an ingredient for making what is the diagnosis of beryllium disease. So, it seems to me this is, as George said, this is a test result.

And so, what I think it has to say is a positive -- we have to see it as a positive test result for beryllium sensitivity and, therefore, be part of the process for diagnosing beryllium disease.

MEMBER TEBAY: Although I will say if you go into the diagnosis of, of established chronic beryllium disease on or after January 1st, 1993, Part B, if you go into Section 2 it says, "in claims that contain a normal or borderline LPT."

So, they are considering the borderline LPT -- both are applicable in the diagnosis of beryllium disease.
And I don't want to get into numbers. National Jewish obviously takes three borderlines. There's one abnormal and one borderline. I mean, there's other, other cocktails of that that make that diagnosis.

But I think we need to be, I think we need to fix it at the core.

MEMBER FRIEDMAN-JIMENEZ: This is George Friedman-Jimenez.

I agree. And I think that this situation is analogous to the situation we have seen with work-related asthma where you have American Thoracic Society criteria to define asthma, but you can't write that into law. It needs a physician diagnosis that takes into account other factors.

So, I think we should here bring in the concept of a physician diagnosis because that's really the necessary step between a test result and the actual diagnosis of record. So, rather than base this decision-making on the test result, the raw rest result, it should be based
on a physician diagnosis of beryllium sensitivity or beryllium disease, which takes into account the test results and allows the physician the medical leeway to make a clinical judgment as he or she sees fit.

MEMBER TEBAY: Well, we have workers that have been to National Jewish based on borderline test results. And those individuals who go to National Jewish, they spend the week there, they go through all the testing. They come home. They meet with their physician before they come home. And they have a diagnosis of sensitization.

Obviously, the language incorporates using borderline test results.

So, so they then submit that to the Department of Labor and they're denied immediately.

CHAIR MARKOWITZ: So, maybe since there's a spectrum of opinion here on what the fix is, maybe what we should do is put it into a working group to see if they can come up with
proposed language to be reconsidered by this Board or the next Board.

MEMBER FRIEDMAN-JIMENEZ: I think we can just add "or a physician diagnosis." Similar to the way the asthma guideline is written.

CHAIR MARKOWITZ: I agree with that.

MEMBER FRIEDMAN-JIMENEZ: Because I can't see that a law can overrule a National Jewish diagnosis of beryllium disease. I mean, that doesn't make any sense.

CHAIR MARKOWITZ: So, if you want to propose new language that we're looking at, then you should give Kevin some guidance here.

The thing is, the act has kind of an extensive section about beryllium sensitivity, disease, pre-'93, post-'93. And I think that if we're going to propose some, anything more than just a simple definitional change of, you know, a positive test, I think we should look at what we're recommending in the context of existing statutory language and, and the procedure manual, to make sure that we get it right.
I don't think we should just do it kind of off the top of our heads.

MEMBER FRIEDMAN-JIMENEZ: I agree. It's 4:36 p.m. And we can't do this in the time that we have. So, we should do it carefully and do it right. I agree.

CHAIR MARKOWITZ: Yes.

MEMBER TEBAY: And I've been through this beryllium procedure. I don't remember the term "borderline" in the procedure 15 years ago. I really don't.

And I was personally working through this on my own, and I don't remember the term "borderline" being called out in any of the diagnoses of sensitization or chronic beryllium disease.

And I can't find any bulletins, or circulars, or any documentation, you know, when that would have changed to add the term "borderline" to this procedure.

Can somebody?

MR. VANCE: I mean, I know that it's
been part of that procedure for quite a while. I, I know that it has not been a recent change. I'd really have to go back and look.

And I think that, you know, we started keeping an inventory of the current edition of the procedure manual quite a few years ago. And I, you know, we can go back and take a look at that, and I can provide Carrie with the outcome of that research to find out when that was added.

But I'm fairly certain that it's been there for quite a while.

MEMBER TEBAY: But, if there has been any change to that language, I don't understand that, because if that was not a part of the original language, how would it have been added?

MR. VANCE: I don't remember the exact context on why that was there. But it would have been a very similar circumstance to this, which is, you know, how do we look at borderline tests potentially being an abnorm -- as being interpreted as an abnormal result. And that's where you get that procedural exception.
Because what the procedural exception is saying is that it, that the existence of steroids, steroidal medication is masking a abnormal test in some way. But the test itself should be interpreted as abnormal.

MEMBER TEBAY: But I, there are certain parts of this procedure for chronic beryllium disease and sensitization that have been modified over the years. Correct?

There's circulars that, that have been applied, or there's language that's been applied. There's been clarifications made. (Audio interference.) -- modification now?

MEMBER FRIEDMAN-JIMENEZ: You're cutting in and out.

MR. VANCE: You're cutting in and out, Calin.

MEMBER FRIEDMAN-JIMENEZ: I volunteer to be on a subcommittee to, to write, work on the language of the recommendation.

CHAIR MARKOWITZ: Okay. Other volunteers?
MEMBER WHITTEN: I'll help.

CHAIR MARKOWITZ: Okay. Did I hear Mr. Tebay say yes? I thought I heard, think I heard him say yes.

(Laughter.)

CHAIR MARKOWITZ: Anybody else?

MEMBER WHITTEN: Dianne will help.

CHAIR MARKOWITZ: Okay. I got you down.

Okay. Well, if anybody decides they want to join, they can join.

Okay. So, we need to move on. We're not going to drop this issue, we're just going to explore it further in a working group.

And this, this Board's term ends July 15th, so if we don't have a product by this time, then whatever, wherever that is at will move on to the next board's term.

Okay. The last issue is, as you know, the nominations. You can self-nominate to continue to serve on the Board, be reappointed.

There are some people who are not
going, current board members who are not going to reapply. I don't want to name them, but I do want to thank them for all your work, actually, over the last couple of years or, in some instances maybe longer, maybe six years. The Board's been around for six years.

And I think, in general, we have, we have contributed to improving the program and raising important issues over the life of this Board and previous boards.

But we do have to spend a couple minutes thinking about how to hand off our work to the next board. And there are two things that I have in mind.

I have a list of issues, a simple list of issues that are still active or are on, should be on the agenda for the future for the Board. And I will share that with board members and you can add, modify as you like. And I will do that in the next two days.

The other list I have is areas of concern that have come out of our claims review.
And I think we spent a fair amount of time looking at those claims, and now reviewing the claims. And I think that the next board, which will have, certainly have some different members, should benefit from, from our work.

So, what I intend to do is to draft a description of these areas of concern, issues of concern, or what have you, however you want to phrase it. But I'm not going to get it completely right. I'm going to send it to the board members for your input, modification.

And, again, I can do that over the next week.

But here's my question, is whether -- we have a working group that's going to meet around the beryllium language. My question is should we try to fit in one short meeting of the Board before July 15th, if we can, to refine our observations from the review of claims, and possibly to provide some additional planning for what the board, the next board might do with the contractor vis-a-vis claims review?
So, I would propose, if we can find a date, that we meet for a few hours, no more than that, on one day to close out these issues. And it may not be possible for us to find a day or a half day when all the board members can be present because we're running again into summer schedules. And in that case, as long as we have a quorum, then I think we're probably better off not meeting at all.

And so I wanted to open the floor for people's input.

MEMBER BOWMAN: This is Aaron. I support that idea. As well as if we can make any, if a vote is necessary on the language for the beryllium, that would be great to do as well before we close down.

CHAIR MARKOWITZ: Good point.

MEMBER FRIEDMAN-JIMENEZ: This is George.

I think we can do a lot of this by email, like the language. But I think it's very useful to have sort of a final sign-out meeting
to hand off what we think is most important and the highest priorities to the next board.

I agree.

MEMBER CATLIN: Yeah, this is Mark Catlin.

Yeah, I also agree. Especially if, if our beryllium recommendations should be a formal approved recommendation by the Board, we should meet by then.

MEMBER GOLDMAN: I agree. Rose Goldman.

MEMBER KEY: Jim Key. I agree.

MEMBER POPE: Duronda Pope. I agree.

MEMBER WHITTEN: I agree. This is Dianne.

CHAIR MARKOWITZ: Great.

MEMBER MIKULSKI: I agree as well. This is Marek. I think that there's going to be issues with (Audio interference.) -- finalizing and making recommendations for the next round.

CHAIR MARKOWITZ: Carrie Rhoads, what's the least number of people we need for a board
meeting?

MS. RHOADS: It's supposed to be a consensus. Any board has to be by consensus. So, I think that means at least a majority. It's not clear how much more than the majority you need. But a consensus is what it is.

CHAIR MARKOWITZ: Well, we always have consensus. We don't stop talking until we have consensus.

MEMBER KEY: And, also, those who cannot meet at the designated time can assign their proxy to another board member.

MS. RHOADS: Yes.

CHAIR MARKOWITZ: But so we need a simple majority.

And then we take recommendations, we take, we take votes. And the majority, I take it the majority of the Board is required -- not the -- the majority of 12 members is needed to pass a recommendation?

MS. RHOADS: I think so, yes.

CHAIR MARKOWITZ: It's not a majority
of the people present at the board meeting?

MS. RHOADS: I think that's right. I can ask for an opinion from our FACA counsel, though, to make sure.

CHAIR MARKOWITZ: Okay. Another question for you, Carrie Rhoads.

MS. RHOADS: Uh-huh.

CHAIR MARKOWITZ: Formally we publish six in advance for a board meeting. That brings us to June 29. And is it, is it at all possible for notice of this short meeting so we have a shorter time frame for advance notice, say four weeks, five weeks? That just gives us a bigger window of time in which to vote -- or meet.

MS. RHOADS: Right. Part of, part of what I think the six weeks is departmental notice, and part of it is FACA requirements for public notice. So, we could possibly shorten the DOL period. We can't shorten the FACA period. But it might be able, you might be able to get DOL approval in less than four weeks, which is what they usually require.
I'd have to --

CHAIR MARKOWITZ: The FACA period is two weeks; right?

MS. RHOADS: Fifteen days.

CHAIR MARKOWITZ: Okay. So, what we'll need to do is to circulate, circulate some dates, which we'll do this week. Please, please respond to Carrie's request for good and bad times so that we can, we can do it quickly.

Another questions I have is we were given some documents recently about the procedure of the program that we are not able to discuss publicly. And so, we haven't been able to discuss it at this meeting.

I do think that a subset of the Board -- I've read these documents, it's not very complicated and won't require a lot of discussion -- but I do think a few, a few of us should review them and discuss them briefly to see whether there's any content that is relevant to the Board.

And I would volunteer to do that along
with a few others.

   If you'd look, if you'd look at those documents you'll see it's not a big deal.

   MEMBER CATLIN: I haven't looked.

   MEMBER SILVER: I'd be happy to join that.

   MEMBER CATLIN: Can you give us inkling of what they contain, or general subject in it? No? All right.

   CHAIR MARKOWITZ: Stuff that's relevant to the programs.

   MEMBER SILVER: I'm happy to participate.

   CHAIR MARKOWITZ: Okay.

   MS. RHOADS: I thought I heard someone else say something, but I missed who that was. If anyone else?

   MEMBER CATLIN: I think it's Mark Catlin. I was also willing to join in with Steve.

   CHAIR MARKOWITZ: Okay, great. If anybody changes their mind and wants to join us,
that's great. I don't think it will take us much more than an hour, so.

MEMBER BOWMAN: This is Aaron Bowman. You can put me down as a tentative. But it will depend on my availability, which is pretty tight over the next couple weeks.

CHAIR MARKOWITZ: Okay, great. Okay.

Okay, thank you. So, we're going to schedule another meeting. We're going to have two small working groups address two different issues.

I'm going to circulate a draft of areas of concern and a list of items for a future board.

Anything else that's pending that I haven't listed?

(No response.)

CHAIR MARKOWITZ: Okay. I don't know whether Mr. Chance is still on.

MR. CHANCE: I am, sir.

CHAIR MARKOWITZ: Okay.

MR. CHANCE: I was just lurking in the
background.

CHAIR MARKOWITZ: Okay. If any board members have any final comments for the meeting, I want to thank everybody for participating.

I want to thank the public commenters and members of the public who are hanging on there and listening to us. This isn't the easiest way to communicate, but at the moment all we have. Hopefully, the next, the first meeting of the next board will be in person, or maybe hybrid to make it easier for the public who can't travel to participate in the meeting.

And, again, for board members, for all the board members I want to thank you, but especially for board members who are not going to continue to nominate themselves to serve I want to especially thank you for your work. I've enjoyed it. And I think we've done some good things.

Mr. Chance?

MR. CHANCE: Okay.

MEMBER POPE: I'd like to make a
comment. I'm sorry, Duronda Pope.

CHAIR MARKOWITZ: Go ahead.

MR. CHANCE: Sorry about that.

MEMBER POPE: That's okay.

I also wanted to thank the board members that weren't going to re-nominate. Thank you for your perspective. I thank you for your time.

You have no idea how the impact it has made on myself and I'm sure others. I appreciate your service.

CHAIR MARKOWITZ: Thank you.

MEMBER SILVER: Steven, I appreciate the thanks you've given. I don't need to be confidential about it. I'm rotating off. When I hear myself talk about things that happened 20 years ago, I realize that I'm just about out of ammo.

But anyone within the sound of my voice among the attendees, if you yourself, or you have a friend or a rival who is thinking of applying, I'm happy to chat with them in advance
of them submitting their nomination papers.

MEMBER GOLDMAN: This is Rose Goldman.

I also want to say I'll be rotating off. And it's been really quite a privilege to be part of this committee. And I'm really so impressed with the work that's being done and actually having accomplished a few things over the last few years.

CHAIR MARKOWITZ: Yeah. I think, you know, compensation is hard. Occupational compensation is very challenging, as witnessed by the gross incompetence of most state-based workers compensation systems to address occupational disease.

You know, when EEOICPA was passed in 2000, the first five years, Part D was designed to have DOE work with the state workers comp systems to facilitate claims review and acceptance. That failed dismally because state workers compensation don't address occupational disease.

And it's to the credit of the
Department, and Congress obviously, that this program was established and has been very successful in providing over $20 billion in compensation and in medical care for just a very broad set of occupational disease.

So, we, you know, we focused on what needs to be improved. I guess that's our job. But we also need to recognize that the program, through a lot of struggle, through a lot of hard work, has been very beneficial to people and is an exceptional, and exceptional compensation program.

Mr. Chance, have I?

MR. CHANCE: I'm sure that Mr. Vance is happy to hear you say that, Steven.

MR. VANCE: I'm very happy to hear that. But I will acknowledge, Ken, I'm going to miss you. I think you always have a good insight. And, Rose, thank you very much for all your work on the Board.

And I will tell you all that we spent a lot of time with these programs thinking about
your input, and the comments. And we do work really hard. And we have seen -- we work hard to try to do what we can for the Board. And I'm going to acknowledge that I think that we have seen some real good improvements in our process based specifically on things that have been recommended by the Board.

So, I just want to acknowledge, acknowledge that. And thank you to everyone who has been part of this.

And, Rose, good luck in your next endeavors.

MR. CHANCE: Yes. So, thank you, John. And, yeah, I can see this from my own perspective, I see how hard the program works and how, you know, there are tall questions to struggle with. And so, it's been an honor for me to be involved in the Board work with you guys.

And those of you who are going on to other things, good luck.

And please do pass the word. Right, Steven? We need to make sure that we get the
next board set up. We are also, like I said in the beginning of the meeting, interested, the Department's very interested in trying to compose a board with a diverse background. So, anything that can be done to assist us with that, we would certainly appreciate it, because you guys do important work.

But it's always important when we have a group like this to have a lot of different ideas, and backgrounds, and thoughts to come out to try to tackle these problems, whether, whether there's a solution or not.

So, Steven, that's all I've got to say. Thank you to everybody.

Do you have anything else, Dr. Markowitz?

CHAIR MARKOWITZ: No, I don't.

MR. CHANCE: Okay. All right then.

Well, then the meeting is now adjourned. Thank you, everybody. And have a great afternoon.

(Whereupon, at 4:57 p.m., the meeting
was adjourned.)