

U.S. DEPARTMENT OF LABOR

+ + + + +

ADVISORY BOARD ON TOXIC SUBSTANCES  
AND WORKER HEALTH

+ + + + +

THURSDAY  
MAY 9, 2024

+ + + + +

The Advisory Board met at the  
Comfort Inn Oak Ridge-Knoxville, 433 South  
Rutgers Avenue, Oak Ridge, Tennessee, at 8:30  
a.m., Dr. Steven Markowitz, Chair, presiding.

SCIENTIFIC COMMUNITY

AARON BOWMAN  
MARK CATLIN  
GEORGE FRIEDMAN-JIMENEZ

MEDICAL COMMUNITY

MARIANNE CLOEREN\*  
STEVEN MARKOWITZ, Chair  
MAREK MIKULSKI  
KEVIN VLAHOVICH

CLAIMANT COMMUNITY

JIM H. KEY  
GAIL SPLETT  
DIANNE WHITTEN  
KIRK DOMINA

DESIGNATED FEDERAL OFFICIAL

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RYAN JANSEN

ALSO PRESENT

KEVIN BIRD, SIDEM  
JOSH NOVACK, DOL  
CARRIE RHOADS, DOL  
JOHN VANCE, DOL

\*Present via videoconference

C-O-N-T-E-N-T-S

Hearing Loss  
Hearing Loss Working Group ..... 10

Follow-up of Day #1 Items  
Board Members ..... 61

EEOICP Quality Assurance  
Board Members ..... 120

Review of Public Comments ..... 127

Follow-up Discussion of Day #1 Topics  
Board work plan ..... 139

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

2 (8:31 a.m.)

3 MR. JANSEN: All right, we'll get  
4 started. Good morning, everyone. My name is  
5 Ryan Jansen and I am the Designated Federal  
6 Officer for the Department of Labor's Advisory  
7 Board on Toxic Substances and Worker Health.

8 I would like to welcome you to Day 2  
9 of this meeting of the Advisory Board here in  
10 Oakridge, Tennessee. Today is Thursday, May  
11 9th, 2024 and we are scheduled to meet from  
12 8:30 a.m. to 11:30 a.m. Eastern time.

13 I am, again, joined by Carrie Rhoads  
14 from the Department of Labor and Kevin Bird,  
15 our Logistics contractor. There will be no  
16 public comment period today.

17 The Board's website which can be  
18 found at  
19 [DOL.gov/owcp/energy/regs/compliance/advisoryboa](https://www.dol.gov/owcp/energy/regs/compliance/advisoryboard.htm)  
20 [rd.htm](https://www.dol.gov/owcp/energy/regs/compliance/advisoryboard.htm) has a page dedicated to this meeting.  
21 The page contains all materials submitted to us  
22 in advance of the meeting.

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1           And will include any materials that  
2           are provided by our presenters today. There  
3           you can also find today's agenda as well as  
4           instruction for participating remotely.

5           If any of the virtual participants  
6           have technical difficulties during the meeting,  
7           please email us at [energyadvisoryboard@dol.gov](mailto:energyadvisoryboard@dol.gov).  
8           If you are joining by Webex, this session is  
9           for viewing only and the microphones will be  
10          muted for non-Advisory Board members.

11          So the public may listen in, but not  
12          participate in the Board's discussion during  
13          the meeting. A transcript and minutes will be  
14          prepared from today's meeting.

15          As the Designated Federal Officer, I  
16          see that the minutes are prepared and ensure  
17          that they are certified by the Chair. The  
18          minutes of today's meeting will be available on  
19          the Board's website no later than 90 calendar  
20          days from today.

21          But if they are available sooner,  
22          they'll be posted sooner. Although formal

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1 minutes will be prepared according to the  
2 regulations, we also prepare verbatim  
3 transcripts and they should be available on the  
4 Board's website within 30 days.

5 During the discussions today, please  
6 speak clearly enough for the transcriber to  
7 understand. When you begin speaking,  
8 especially at the start of the meeting, make  
9 sure that you state your name so it's clear who  
10 is saying what.

11 Also, I would like to ask that our  
12 transcriber please let us know if you have  
13 trouble hearing anyone or any of the  
14 information that is being provided.

15 I'd also like to mention that the  
16 terms of the 12 current Board members expire in  
17 July, 2024. As such we have invited interested  
18 parties to submit nominations for individuals  
19 to serve on the Board.

20 Membership is balanced between the  
21 scientific, medical and claimant communities  
22 and current members may be renominated and

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1 reappointed.

2 Nominations for individuals to serve  
3 on the Board must be submitted by May 17, 2024.  
4 For further information, including details  
5 about how to submit nominations and what  
6 materials are needed, please visit the Board's  
7 website.

8 As always, I would like to remind the  
9 Advisory Board Members that there are some  
10 materials that have been provided to you in  
11 your capacity as Special Government Employees  
12 and members of the Board which are not suitable  
13 for public disclosure and cannot be shared or  
14 discussed publicly including during this  
15 meeting.

16 Please be aware of this throughout  
17 the discussions today. The materials can be  
18 discussed in a general way which does not  
19 include any personally identifiable information  
20 or PII such as names, addresses or a doctor's  
21 name if we are discussing a case.

22 With that, I convene this meeting of

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1 the Advisory Board on toxic substances and  
2 worker health. I will now turn it over to Dr.  
3 Markowitz for introductions.

4 CHAIR MARKOWITZ: Good morning.  
5 Let's do a quick round of introductions and  
6 then begin the meeting. Steven Markowitz,  
7 Board Chair, a professor at City University of  
8 New York and Occupational Medicine physician.  
9 Yes, Mr. Domina.

10 MEMBER DOMINA: Kirk Domina, I'm a  
11 retired Hanford worker of 38 years in reactor  
12 operations, nuclear chemical operator and 14  
13 years as employee health advocate for the  
14 Hanford Atomic Metal Trades Council.

15 MEMBER WHITTEN: Dianne Whitten. I  
16 am the current Hanford Atomic Metal Trades  
17 Counsel Health Advocate. I am RADCON tech by  
18 trade, 36 years at the Hanford Nuclear  
19 Reservation.

20 MEMBER CATLIN: Hi, I'm Mark Catlin,  
21 Industrial Hygienist retired.

22 MEMBER VLAHOVICH: Good morning. I'm

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1 Kevin Vlahovich, I'm an Occupational Medicine  
2 physician and Director of Employee Occupational  
3 Health at University of New Mexico.

4 MEMBER KEY: Good morning. Jim Key,  
5 49 year plus Cold War veteran employed 35 years  
6 Paducah Gaseous Diffusion Plant, the remaining  
7 time at the depleted uranium hexafluoride  
8 facility, President of the United Steelworkers  
9 International Union, Atomic Energy Workers  
10 Council which encompasses eight DOE/EM  
11 locations across the nation including Idaho;  
12 Hanford; Carlsbad, New Mexico; Oak Ridge;  
13 Paducah, Kentucky; Portsmouth, Ohio; Erwin,  
14 Tennessee and Bettis Labs in Pittsburgh.

15 MEMBER SPLETT: Gail Splett, retired  
16 from the Department of Energy at Handford after  
17 45 years.

18 MEMBER BOWMAN: My name is Aaron  
19 Bowman. I am a professor and interim Dean of  
20 the College of Health and Human Sciences at  
21 Purdue University. I am a toxicologist.

22 MEMBER FRIEDMAN-JIMENEZ: Good

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1 morning. I'm George Friedman-Jimenez. I'm an  
2 Occupational Medicine physician and  
3 epidemiologist. I've been running the  
4 Bellevue/NYU Occupational Medicine Clinic for  
5 33 years, seen a lot of patients, taught a lot  
6 of medical students.

7 I lead the course for 20 years that  
8 taught medical students the principles of  
9 diagnosis so I've been always interested in  
10 diagnostic theory and practice and applying it.

11 And this morning I'm going to talk  
12 about part of that which is causation. But  
13 I'll leave that for a minute when we start.

14 MEMBER MIKULSKI: Good morning, Marek  
15 Mikulski, occupational epidemiologist,  
16 University of Iowa, Occupational and  
17 Environmental Health. I direct Iowa Former  
18 Worker Program.

19 CHAIR MARKOWITZ: Thank you. So  
20 today's agenda, we're going to start off with a  
21 kind of a report from the hearing loss working  
22 group and then launch into some proposed

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1 recommendations.

2 And then we'll take it from there  
3 picking up whatever threads, other threads from  
4 yesterday and then kind of establishing what  
5 the future work of the Board will be during the  
6 remainder of this term and going into the next  
7 term.

8 The hearing loss working group  
9 didn't, hasn't quite completed a review, an  
10 update of relevant scientific literature. But  
11 instead we thought it would be a good thing to  
12 actually talk about the different kind of  
13 weight, talk about how we think about  
14 causation.

15 And in relation to hearing loss which  
16 in the program relates to two causes really,  
17 noise and solvents. It's especially  
18 interesting conversation so welcome Dr.  
19 Friedman-Jimenez to discuss this.

20 MEMBER FRIEDMAN-JIMENEZ: Thank you,  
21 Dr. Markowitz. Our working group consists of  
22 Dr. Aaron Bowman, and Dr. Marianne Cloeren and

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1 myself and we're focused on hearing loss which  
2 in this program is largely related to solvents.

3 But is also related to other factors  
4 including noise and that's what I'm going to  
5 talk about today. We have started a literature  
6 review.

7 Dr. Cloeren is leading that, but  
8 there's a lot of literature out there and in my  
9 own reviewing of some of the articles that  
10 we've identified, there's some good and some  
11 bad literature.

12 And it really requires sorting  
13 through the studies carefully and reading them  
14 carefully and so this is taking a fair bit of  
15 time so we're not ready to give a report on all  
16 of the literature review.

17 But there is a very important issue  
18 involved in interpreting the information that  
19 we find which is how do you interpret when  
20 there two different causes of a disease and one  
21 is occupational and one is not?

22 How do you interpret that? How do

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1 you deal with it? How do you apply it? So  
2 that's what I'm going to talk about today. And  
3 this is often called interaction.

4 And we'll go through that fairly  
5 deeply what that means when you have causes  
6 either competing causes or causes that combine  
7 and both participate in the causation process.  
8 Next slide please.

9 I have no conflict of interest. As I  
10 said, I'm an occupational medicine physician  
11 and an internist and for many years have been  
12 interested in the diagnosis of medical disease.

13 And in occupational medicine, this  
14 includes both the medical diagnosis and the  
15 causal diagnosis which is something that most  
16 doctors don't spend a lot of time studying or  
17 thinking about.

18 But we do in occupational medicine so  
19 I've been working on this as a theoretical  
20 problem. Next slide please. So in today's  
21 talk I'm going to go through an example in some  
22 depth.

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1           The challenge of two interacting  
2 causes. I'm going to use lung cancer asbestos  
3 and smoking as the example. This is not  
4 hearing loss, obviously, but it's the best  
5 understood disease that has two known prominent  
6 causes.

7           And with the best data that I could  
8 find which not by coincidence was published by  
9 Dr. Steven Markowitz of a study of asbestos  
10 insulation workers and lung cancer and smoking.

11           And then I'm going to illustrate how  
12 we interpret these data for lung cancer and  
13 asbestos and smoking and propose an analogous  
14 approach to the hearing loss cases.

15           And present some examples of studies  
16 of hearing loss solvents and noise exposure and  
17 then conclusions and next steps. So next slide  
18 please.

19           We'll start off with a patient, an  
20 80-year old man with an extensive smoking  
21 history and a very intense asbestos exposure  
22 history many years ago with plenty of latency

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1 period.

2 And this case illustrates two  
3 potential causes of the lung cancer that he now  
4 has and multiple possible causal mechanisms.  
5 Next slide please.

6 What does work-related mean? Well  
7 this is sort of the crux of the issue. Is the  
8 disease work-related? Is it related to his  
9 exposures in the work place? OSHA defines this  
10 in the Standard 1904.5 which is actually an  
11 excellent standard and I'll just read it  
12 verbatim.

13 You must consider an injury or  
14 illness to be work related if an event or  
15 exposure in the work environment either caused  
16 or contributed to the resulting condition or  
17 significantly aggravated a pre-existing injury  
18 or illness.

19 So the three terms here that we focus  
20 on are caused, contributed to and aggravated.  
21 Next slide please. So cause, cause has been  
22 studied for millennia.

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1           And, you know, everyone understands  
2 intuitively and by experience how to determine  
3 whether something is causal or not. You know,  
4 you flip the light switch and the light goes  
5 on.

6           Was that just by magic or was there  
7 some causal pathway and, you know, as babies we  
8 figure this out. But it's never been really  
9 defined to perfection.

10           And there are always difficulties so  
11 one of the main concepts that for several  
12 hundred years have been used as necessary and  
13 sufficient causes.

14           And I'm sure you've heard those terms  
15 and not just in legal arena, but in everyday  
16 life. A necessary cause is a condition under  
17 which if it's absent, the disease cannot occur.

18           It's also called sine qua non or "but  
19 for" cause by the lawyers. A sufficient cause  
20 is a condition which if it's present, the  
21 outcome will inevitably occur.

22           In other words, everything has been

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1 met and the event happened. These are  
2 deterministic definitions. They're not  
3 probabilistic, they're not statistical.

4 But they're easier to think about  
5 than the probabilistic definition and these  
6 have been studied for hundreds of years, but in  
7 the last say 30 years, there's been a huge  
8 increase in the amount of publications.

9 Next slide please. This is a graph  
10 of the number of publications on causal  
11 inference in epidemiology over the last 30  
12 years. You can see it's rising probably  
13 exponentially.

14 It ended here in 2016 and there's  
15 been even more since 2016. Next slide please.  
16 So our concepts of causation are really stuck  
17 back in the 20th century in terms of how it's  
18 applied.

19 But the theory and now research  
20 methods are really much more advanced than this  
21 and I think there's some room for fine tuning  
22 and bringing our conception into the 21st

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1 century.

2 And hopefully improving things and  
3 making the determination of causation more  
4 accurate. So necessary and sufficient causes  
5 as a stand-alone concept don't work well.

6 And I'll show you some examples of  
7 how they don't when you just use them alone.  
8 Next slide please. But they can be useful in a  
9 setting that I'll discuss in detail.

10 First example, asbestos exposure can  
11 cause mesothelioma. But it's not a necessary  
12 cause because in the absence of asbestos  
13 exposure, people can get mesothelioma.

14 So it's not necessary for  
15 mesothelioma causation. It's not sufficient  
16 either because among all the individuals that  
17 are exposed to asbestos, the great majority  
18 don't get mesothelioma so asbestos is not  
19 sufficient to cause mesothelioma by itself.

20 So next example is hepatitis B and  
21 hepatitis B carrier state can cause  
22 hepatocellular carcinoma, liver cancer. And in

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1 the absence of hepatitis B, people still get  
2 liver cancer from other causes.

3 Many hepatitis B carriers don't get  
4 liver cancer so it's not sufficient either.  
5 The most common example is probably smoking and  
6 lung cancer. Smoking can cause lung cancer.

7 That's pretty well accepted. Ten to  
8 15 percent of people with lung cancer never  
9 smoked. So it's not necessary. There are  
10 other causes of lung cancer.

11 Eighty to 90 percent of people who  
12 don't get lung cancer who smoke so smoking is  
13 not sufficient to cause lung cancer. So these  
14 are examples, next slide please, of how  
15 necessary and sufficient on their own are not  
16 adequate for our purposes.

17 In 1976, Kenneth Rothman, an  
18 epidemiologist now at Boston University was at  
19 Harvard at the time proposed using these  
20 necessary and sufficient concepts as sufficient  
21 component causes in epidemiologies which is  
22 what he called them.

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1           This was first described in 1965 by  
2 Mackie and called INUS, I-N-U-S. A is the  
3 cause of B. If A is an insufficient, but  
4 necessary part of a condition that is itself  
5 unnecessary, but sufficient for B.

6           You got that? Too early in the  
7 morning. So 20 years later, a lawyer named  
8 Wright, Richard Wright, simplified it somewhat  
9 and called it NESS.

10           NESS is A is the cause of B if A is a  
11 necessary element of a sufficient set of  
12 component causes of B. It's a little bit  
13 easier to think about.

14           It still, it takes a few months of  
15 working with it before it's intent and it's  
16 second nature. The sufficient component cause  
17 model fits really well with the OSHA definition  
18 of work relatedness.

19           I want to mention that and I think  
20 it's really important that the definition of  
21 work relatedness really matches the current  
22 scientific understanding of causation.

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1                   And it's a really good definition and  
2 I think it's very useful for our purposes. It  
3 accommodates mutually exclusive causes, single  
4 causes, contributing causes and aggravating  
5 causes. Next slide please.

6                   So this is the Rothman model. It's  
7 often called the pie model for obvious reasons.  
8 And here, this is the simplest possible model  
9 where you have four sufficient causes. I call  
10 SC 1 Sufficient Cause 1, SC 2, SC 3 and SC 4.

11                   And in this model, Mr. A.S. who is  
12 our patient could have gotten lung cancer by  
13 any of those four different and mutually  
14 exclusive sufficient causes.

15                   He either got it by SC 1 or SC 2 or  
16 SC 3 or SC 4. So each sufficient cause is a  
17 sufficient set of component causes. So we call  
18 these "U". One of the components is the  
19 unmeasured factors that cause lung cancer.

20                   Say U1 and I'll go through them in  
21 the next few slides. So each sufficient cause  
22 includes all of its necessary component causes.

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1 Everything that's needed to cause lung cancer  
2 is in the model under the Us except for the  
3 exposure that we're talking about that's  
4 separated out so that we can see what it's  
5 doing.

6 If any one of these component causes  
7 is absent, then that particular sufficient  
8 cause mechanism cannot happen. So this follows  
9 a deterministic model and sufficient causes  
10 one, two, three and four compete with each  
11 other.

12 Only one of them actually happens  
13 first. And once that happens, then the person  
14 has cancer and the other causes may be part way  
15 along the pathway, but haven't yet completed it  
16 and caused the cancer by that mechanism.

17 So only one actually causes the lung  
18 cancer before the others are completed. Next  
19 slide please. So U1s, sufficient cause 1  
20 doesn't involve either asbestos or smoking.

21 And there are people who get lung  
22 cancer who have never smoked and who were never

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1 exposed to asbestos. And you can argue that,  
2 you know, maybe they're, you know, exposed to  
3 second hand smoke or second-hand asbestos, low  
4 levels.

5 But the numbers are well beyond what  
6 those very low doses would cause so U1 is an  
7 unmeasured set of genetic, epigenetic, temporal  
8 and environmental component causes that are  
9 sufficient to cause lung cancer in Mr. A.S.

10 So this is a pathway that could  
11 happen if he had not been exposed to either  
12 asbestos or had smoked. Next slide please.  
13 Sufficient Cause 2 is a different sufficient  
14 cause for which both the Component Cause  
15 Asbestos, I abbreviate ASB and Component Causes  
16 U2 are necessary.

17 And unmeasured Cause 2, U2, is  
18 different from U1, but it also doesn't include  
19 either smoking or asbestos. It's all the other  
20 factors that are involved that combine with  
21 asbestos to cause cancer.

22 So asbestos and U2 are each a

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1 necessary element of the sufficient set SC 2.  
2 Next slide please. Sufficient Case 3 has the  
3 necessary elements U3 and smoking.

4 This is the smoking pathway as  
5 opposed to the asbestos pathway and U3 can  
6 include just as an example and this is way over  
7 simplified, factors like the RAS oncogene or  
8 other genetic factors and virtually all cancers  
9 have some genetic component.

10 Down regulation of tumor suppressor,  
11 mRNA, let-7 that targets the RAS oncogene or  
12 other epigenetic factors which are more recent  
13 branch of science that involves not the gene  
14 itself, but modifications to the gene that turn  
15 it on and off and allow or block its  
16 expression.

17 And adequate latency period for the  
18 clinical manifestation of the lung cancer.  
19 Latency period is also part of this U3, the  
20 unmeasured causes.

21 It has to, you have to have plenty of  
22 time for the cancer to develop, but then once

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1 it does, bang. On a certain day, nobody knows  
2 when because it's only one cell that  
3 transforms, you get a cancer and then that cell  
4 grows out of control to become a tumor.

5 Next slide please. So Sufficient  
6 Cause 4, SC 4 requires both asbestos and  
7 smoking. And it has another set of unmeasured  
8 causes U4. So for example, we know a little  
9 bit about how this works.

10 The mechanism might involve the  
11 asbestos in the lung damages the pulmonary  
12 macrophages, the cells in the lung whose job it  
13 is to clean out the lung.

14 And they grab up the tar particles  
15 from the cigarette smoking and they move it up  
16 and you cough it out and so that helps to  
17 prevent the tar exposure inside your lung.

18 And that mechanism can be blocked if  
19 the macrophages are damaged so the asbestos can  
20 damage the macrophage and leave more tar in the  
21 lungs so the cigarette smoking causes the  
22 cancer more easily.

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1           So this is a combined mechanism that  
2 requires both the asbestos and smoking and this  
3 is sometimes called synergism and sometimes  
4 it's called super additive mechanism. Next  
5 slide please.

6           So in Mr. A.S.'s case, his lung  
7 cancer could have been caused by any one of  
8 these four sufficient causes. And likewise,  
9 his cancer could have been prevented by  
10 preventing just one of a component cause.

11           For example, if he got his cancer by  
12 SC3 which involves smoking and the other  
13 factors, if he had quit smoking or had never  
14 smoked, he may not have gotten that lung  
15 cancer. It could have been prevented.

16           When I say prevented, it's not  
17 absolute. It could be, you know, statistically  
18 a partial prevention reducing his risk of lung  
19 cancer. Likewise, if he hadn't ever been  
20 exposed to asbestos, SC2 and SC4 could not  
21 happen because they require asbestos.

22           So the problem is that we don't know

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1       which of these mechanisms is going on in any  
2       individual. We can only see it in a group. So  
3       it's not quite as simple as the model would  
4       have you think because we can't identify it  
5       yet.

6                Maybe someday we'll have a biomarker  
7       that can identify what mechanism occurred, but  
8       we don't yet. Next slide please. Okay, these  
9       are the data from Dr. Markowitz's study.

10               And you obviously can't read them,  
11       but I'm going to pull them out for you. Next  
12       slide please. So taking the data here which  
13       you can't read, I'll just blow it up.

14               And next slide please, there are four  
15       groups in these, in this cohort which was put  
16       together by Dr. Markowitz as a group from the  
17       American Cancer Society who were non-smokers  
18       who did not, I'm sorry, who were smokers and  
19       non-smokers.

20               But who never had exposure to  
21       asbestos. So that's the non-asbestos cohort.  
22       The asbestos cohort is a group of insulating

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1 workers that Dr. Selikoff had collected.

2 Dr. Markowitz, please correct me if I  
3 misrepresent anything. But so these are two  
4 cohorts that are merged together and the  
5 numbers here are the N so 18,843 people from  
6 the Cancer Society cohort that did not smoke  
7 and had no asbestos exposure.

8 The 468 from the insulators who had  
9 only asbestos exposure, but did not smoke.  
10 Thirty-five thousand four hundred who smoked,  
11 but did not have asbestos exposure from the  
12 cancer, American Cancer Society cohort and  
13 1,909 who both smoked and had asbestos exposure  
14 from the insulators.

15 So this is a combination of these two  
16 cohorts. And among those numbers of people  
17 that were followed for around 20 years on  
18 average, there were 151 cases of lung cancer in  
19 the non-smoking, non-asbestos group.

20 Eighteen in the asbestos only group,  
21 2,540 in the smoking group and 321 in the both  
22 asbestos and smoking exposed group. These are

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1 exposure groups that you can observe that you  
2 can tabulate and analyze.

3 And so these numbers are all over the  
4 place because there are thousands in one group  
5 and hundreds in another group. So we have to  
6 adjust, we have to make the numbers so they're  
7 comparable.

8 So what we do is we divide the number  
9 of cases by the number of person years, how  
10 long the person was followed times the number  
11 of people that were followed that length.

12 So there were 377,000 person years in  
13 the non-smoking, non-asbestos group. And those  
14 18,000 people were followed for about 20 years  
15 so 20 years times 18,000 people gives you  
16 something like 377,000.

17 So this is how we do it in  
18 epidemiology so these are called, next slide  
19 please, incidents rates. So the lung cancer  
20 incidents rate in the first group, nonsmoking,  
21 no asbestos is four per 10,000, .0004 and to  
22 simplify it I just pulled out the factor of

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1 10,000 so there are four.

2 So that's a rate and that is  
3 comparable relatively so to the 21 per 10,000  
4 that occurred in the asbestos group. Thirty-  
5 nine in the smoking group and 107 in the both  
6 asbestos and smoking groups. Next slide  
7 please.

8 So we can actually deduce how many  
9 occur by each mechanism in this group, not for  
10 the individual, but for the groups. And these  
11 are approximate numbers because these groups  
12 were adjusted differently for age and gender.

13 And well I guess they were all men,  
14 but for age and so they're not strictly  
15 comparable, but they're approximately  
16 comparable and I'll ignore that minor detail.

17 And it is a minor detail because the  
18 numbers are pretty big. So four cases that  
19 occurred in the non-smoking, non-asbestos  
20 group, none of them could have involved either  
21 asbestos or smoking because those people were  
22 not exposed to asbestos or smoking so those are

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1 all SC1 sufficient causes.

2 So we can deduce first that there are  
3 four SC1s. In the second group, asbestos only  
4 in the insulators, there were 21 cases. But  
5 out of those 21, some of the people might have  
6 gotten the cancer, or did get the cancer  
7 without the asbestos that they were exposed to.

8 The asbestos doesn't make you immune  
9 to the other mechanism that you could have  
10 gotten lung cancer. So you had those four,  
11 there would be about four SC1s that would occur  
12 in that group.

13 But in addition there were SC2s that  
14 occur with asbestos that require asbestos for  
15 the mechanism. So you can subtract off the  
16 four from the 21 and get 17 and so this process  
17 of deduction, you continue it the next group  
18 out of the 39 cases among smokers, 35  
19 subtracting off the four SC1s were by a  
20 mechanism SC3.

21 And in the last group which is the  
22 most interesting group for us, there are 107

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1 cases, but four were SC1s, 17 were SC2s and 35  
2 were SC3s. So there were 51 left that would  
3 have required both asbestos and smoking.

4 So this is how we can get an idea how  
5 important smoking and asbestos combined  
6 mechanism is for this particular disease and  
7 exposure. Next slide please. Next slide  
8 please.

9 So if you eliminated asbestos  
10 exposure, how many cases would you have  
11 prevented? Well you couldn't prevent the  
12 smoking cases. Right? Because they weren't  
13 dependent on asbestos.

14 You couldn't prevent the cases that  
15 didn't depend on either asbestos or smoking so  
16 those four SC1s and 35 SC3s could not be  
17 eliminated by eliminating asbestos.

18 On the other hand, all 17 of the SC2s  
19 and all 51 of the SC4s would have been  
20 eliminated if you prevented smoking. Next  
21 slide please.

22 So applying this to compensation,

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1 this is a pretty well-developed area of  
2 compensation for lung cancer among people with  
3 asbestos exposure and many of whom are smokers.

4 So generally these cases are  
5 compensable in both smokers and non-smokers.  
6 And the lung cancer relative risk for asbestos  
7 among smokers or among non-smokers is what you  
8 use to make that causal judgment to support the  
9 claim.

10 And for smokers, the relative risk is  
11 2.75 for asbestos. Okay? For nonsmokers, the  
12 relative risk for asbestos is five, 5.2. So  
13 you know, they're somewhat different relative  
14 risks, but they're both largely elevated, 2.75  
15 means there's 2 almost three-fold increase in  
16 the risk of lung cancer due to asbestos among  
17 smokers.

18 So the causation standard that we  
19 use, it's more likely than not that the lung  
20 cancer was causally related to the asbestos  
21 exposure is what we apply and we use the  
22 relative risk that's appropriate for that

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1 person whether a smoker or not, you use the  
2 corresponding relative risk.

3 And so this is how people think about  
4 it for the lung cancer in asbestos and smoking  
5 patients, claimants, but you can apply the  
6 similar logic to people with other risk factors  
7 who didn't smoke who have a genetic risk  
8 factor.

9 Virtually every lung cancer case  
10 involves some genetic mechanisms as well which  
11 we are starting to understand. There are other  
12 epigenetic mechanisms most of which we don't  
13 yet understand.

14 Age is a major factor, gender is a  
15 major factor. All of these are non-  
16 occupational contributing causes that combine  
17 with the asbestos and, you know, they  
18 essentially are ignored in the logic of  
19 causation decision making and compensation.

20 Next slide please. So this  
21 precedent, this experience that we have with  
22 lung cancer and asbestos and smoking, I want to

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1 apply this as an analogy to the hearing loss  
2 case that we're in now that we're trying to  
3 develop some better understanding.

4 The presumption of work-related  
5 hearing loss is presented in the Procedure  
6 Manual and there are two criteria that the  
7 person has to meet.

8 First they have to have potential  
9 exposure to one or more of a list of ten  
10 qualifying toxic substances for at least ten  
11 consecutive years of verified employment.

12 And there's a list of 20 or 30  
13 qualifying jobs or equivalents as determined by  
14 a contract IH opinion. And they have to have  
15 the IH opinion that the claimant also had  
16 concurrent daily exposure to noise above 85  
17 decibels for those same ten years.

18 If one and two are not both met, then  
19 that means the person doesn't meet the  
20 presumption criteria and so they get then  
21 relegated to the next category where they have  
22 to be evaluated by the CMC by the contract IHS

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1 on a case-by-case basis to determine if their  
2 cancer was related to -- I'm sorry, if their  
3 hearing loss was related to the toxic  
4 substance.

5 And this is defined in the Procedure  
6 Manual. Next slide please. So the question  
7 is, should we use a similar approach for  
8 hearing loss that we could, that could be  
9 caused by solvents or noise or both similar to  
10 the procedure, the way we think about lung  
11 cancer and smoking and asbestos.

12 Next slide please. And so, first  
13 question is, are there data to support this?  
14 And so I did a little quick and dirty  
15 literature search and found a few articles that  
16 publish the actual relative risks for hearing  
17 loss by solvents broken down into noise exposed  
18 group and a non-noise exposed group.

19 And not all the studies published  
20 stratified it on noise exposure. But the few  
21 that I found actually there were two others  
22 that I found that were just terrible studies

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1 and I couldn't even include them. I just threw  
2 them out. And we find these.

3 We find studies that are well done  
4 studies that are not well done and you actually  
5 have to read the study. And this is quite time  
6 consuming and this is a problem.

7 And, you know, we ourselves are  
8 trying to find the time to read through all  
9 these studies and evaluate their quality.  
10 There have been many attempts to automate the  
11 quality determination of studies.

12 And none of them have really worked  
13 in a way that save us a whole lot of time that  
14 we don't have to read the whole study. So I  
15 read a few studies here, but as I say later,  
16 we'll have to do a proper literature search.

17 So pulling out the, I don't know if  
18 you can read it from here, but this is a study  
19 by Sliwinska-Kowalska 2005 and she has done  
20 many studies of hearing loss and chemicals.

21 And this was in JOEM, the Journal of  
22 Occupational and Environmental Medicine quite a

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1 well-done study. The first data point is non-  
2 exposed, neither noise nor solvent exposure.

3 And she looked at styrene and she  
4 looked at combined styrene and toluene so that  
5 second odds ratio, these are odds ratios and  
6 odds ratios are very similar to relative risks.

7 If it's one, that means the rate is  
8 not elevated in the exposed group. If it's  
9 above one, that means the rate is higher in the  
10 exposed group.

11 If it's less than one, that means  
12 it's lower or may be prevented by the exposure.  
13 We didn't find that, but these are statistics  
14 so they have statistical variation.

15 And so the error bars there are the  
16 95 percent confidence interval for that odds  
17 ratio. So the second column is only noise  
18 exposure.

19 And the odds ratio is 3.3 so there's  
20 a three-fold elevation among these workers in  
21 hearing loss among those who were exposed to  
22 noise.

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1           And they define noise as greater than  
2           85 decibels and, you know, every day, every  
3           second, the noise level in the work place  
4           changes so they actually used very  
5           sophisticated individual measurement of noise  
6           for every single person in the study.

7           And they did individual measurements  
8           of the solvent exposures as well. So the 3.3  
9           fold elevation is for only noise. And then for  
10          the styrene exposed, only styrene exposure, no  
11          noise exposure.

12          In other words, the noise level was  
13          below 85 decibels for everyone. The odds ratio  
14          was 5.2. That's just for styrene and then the  
15          fourth data point is styrene and noise exposure  
16          and the odds ratio was 10.9.

17          But you can see the confidence  
18          interval is quite wide. And you know, these  
19          are quite labor intensive studies to do so the  
20          numbers are not always very big. So the  
21          confidence intervals can be wide.

22          So we have to review the literature

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1 and look at a number of studies and hopefully  
2 find the best ones. The fifth data point is  
3 styrene and toluene.

4 And so these are both solvents and no  
5 noise exposure in the fifth and the odds ratio  
6 was 13.1 and for styrene toluene and noise  
7 exposure, the odds ratio was 21.5. Next slide  
8 please.

9 And so it turns out you can calculate  
10 the odds ratio for the noise exposed group, the  
11 odds ratio for styrene in the noise-exposed  
12 group and in the noise-unexposed group by  
13 simply dividing out the odds ratios and I did  
14 it here.

15 I won't go through the details, but  
16 if you want to see the proof, I can easily show  
17 that to you later. And it's in epidemiology  
18 text books.

19 So the odds ratio for just styrene  
20 among non-noise exposed, they've calculated it  
21 was 5.2. The odds ratio for styrene plus  
22 toluene exposure was 13.1 for the non-noise

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1 exposed.

2 And for the noise exposed, the odds  
3 ratio for the styrene was 3.3. So even among  
4 those that have noise exposure, the styrene  
5 increases the risk of hearing loss by about  
6 threefold.

7 And for those exposed to styrene and  
8 toluene, it was 21.5 divided by 3.3, 6.5 so  
9 it's sixfold elevation due to the styrene and  
10 toluene among the noise exposed people.

11 Next slide please. So this shows  
12 that there's a very substantial elevation in  
13 the risk of hearing loss among people that are  
14 exposed to solvents.

15 And that's true in the noise exposed  
16 group as well as in the noise non-exposed group  
17 from that study. The second study here is by  
18 Kim, et al., 2005, yes.

19 And their odds ratios, I'll just cut  
20 to the chase here, mixed solvents was what they  
21 studied. It was a long list of mixed solvents,  
22 not just styrene or toluene.

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1           And their odds ratio was 2.6 in the  
2 non-noise exposed group and 1.9 in the noise-  
3 exposed group. Next slide please. The next  
4 study was by Saraei among tire factory workers.

5           And they looked at organic solvents  
6 and among the non-noise exposure the odds ratio  
7 was 1.86. It was not statistically  
8 significant. All the rest of them were  
9 statistically significant.

10           I just didn't have time to make that  
11 notation. In the noise exposed group, the odds  
12 ratio was 2.6. So among people exposed to  
13 noise, the styrene has the effect of increasing  
14 their risk of hearing loss twofold, threefold,  
15 and more in these three studies.

16           As I said, there's a great deal of  
17 variation. There's a huge variation in  
18 workplace exposures by occupation, by industry,  
19 over time with, you know, enforcement of OSHA  
20 standards that come into effect more in the  
21 '90s and 2000s and then earlier.

22           So all these factors have to be

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1 considered when you put it together. But there  
2 is some good evidence and at least the first  
3 study which I read in great detail is very well  
4 done and I would believe its conclusions.

5 You know, that doesn't mean that  
6 that's true for every workforce because of the  
7 variation among workforces, but there is some  
8 good evidence that solvents alone can cause  
9 hearing loss.

10 And that solvents, in combination  
11 with noise can cause even more hearing loss.  
12 So next slide please. So I think we can  
13 conclude from this that at least these three  
14 studies in this preliminary literature review  
15 suggests that solvents cause hearing loss, can  
16 cause hearing loss among noise exposed and non-  
17 noise exposed workers.

18 And when there may be a non-  
19 occupational and second causal exposure that  
20 interacts with the occupational exposure, there  
21 is a precedent for how we think about this.

22 And the lung cancer precedent is that

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1 you use the relative risk for the appropriate  
2 group, the smoking group, you use the relative  
3 risk for asbestos among smokers.

4 In the non-smoking group, you use the  
5 relative risk for asbestos in non-smokers. So  
6 likewise, in the hearing loss, you can use the  
7 relative risk for the occupational exposure  
8 with, due to solvents even in, if the noise is  
9 occupational or non-occupation.

10 You know, the occupational aspect of  
11 it is brought in by the solvents and not  
12 necessarily by the noise. And a lot of people  
13 have other noise exposures.

14 You know, among this group of  
15 workers, many were in the military, you know,  
16 firearm noises quite loud and impulse noise has  
17 a particularly damaging effect on hearing.

18 So many have been exposed to firearm  
19 impulse noise. People go hunting, people  
20 listen to loud music, people mow their lawn and  
21 the muffler's not working very well, they  
22 listen to music with headphones which can be

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1 even much louder than speakers because you  
2 don't have to worry about the neighbors and  
3 turn it up and you can really harm your ears  
4 and hearing with that.

5 So there are a lot of noise exposures  
6 that may or may not be occupational, but either  
7 way, the hearing loss is exacerbated. You get  
8 cases that require both solvent and noise  
9 exposure that would be eliminated if you  
10 eliminated the solvent exposure.

11 So the OSHA standard I think  
12 addresses this very well. And it does fit our  
13 current understanding of these interactions.  
14 Next slide please. So I think where do we go  
15 from here?

16 I think the first step is to do our  
17 literature search and review and read the  
18 articles which is quite a task. And the  
19 question that I would focus on is among workers  
20 exposed to the loud noise, does solvent  
21 exposure cause hearing loss?

22 And then other relevant questions to

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1 investigate is there a threshold for duration  
2 of exposure needed for causation? You know,  
3 does it have to be ten years? Does it have to  
4 be ten consecutive years?

5 And does the loud noise need to be  
6 concurrent with the solvent exposure or could  
7 it be, you know, another day or could it be  
8 another year?

9 And I didn't find really anything on  
10 that in the studies that I read. So I'd like  
11 to, we'll do our literature review, but it  
12 would be good if we could see the studies that  
13 the Procedure Manual was based on if we don't  
14 find them in our literature search.

15 Hopefully we will. And really, see,  
16 this is something that is not easy to study and  
17 it's rarely studied. The duration of exposure  
18 and it varies a lot among people.

19 And it's not well characterized in  
20 most articles so it may be difficult  
21 information to get. But again, the presumption  
22 approach doesn't, it's not the last

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1 determination.

2 It's just sort of taking the most  
3 obvious cases off the top and compensating them  
4 without really further evaluation based on easy  
5 to get information. And then the rest need to  
6 be evaluated case by case by a CMC, by an IH  
7 and it's much more labor intensive.

8 So we're trying to make it a little  
9 more efficient by taking these obvious cases  
10 out of that and not making doctors and IHs go  
11 through the obvious if it's just such a slam  
12 dunk case.

13 But there needs to be a real effort  
14 to find the answers to these questions. I'm  
15 not convinced that it's out there, but let's  
16 see what we can find. And then, depending on  
17 what we find, I think we should consider a  
18 Board recommendation to update the Procedure  
19 Manual if it's warranted.

20 You know, and we're not there yet so  
21 we have to find out what we see in the  
22 literature and how we interpret it. So I

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1 wanted to present this.

2 I know it was a little technical and,  
3 but this is not how most doctors think about  
4 causation and it's very well discussed in the  
5 epidemiology literature and most clinicians who  
6 make diagnoses don't even have a clue about how  
7 all of this stuff works.

8 And so, you know, we have  
9 toxicologists, we have industrial hygienists,  
10 exposure measurement and clinical occupational  
11 medicine here.

12 And I think that we can put this  
13 together and if we find the evidence that we  
14 need in the literature, we can probably update  
15 the Procedure Manual in a way that meets  
16 whatever Government constraints hereunder and  
17 that would more accurately classify people.

18 I can, I could give another talk on  
19 accuracy of determinations, but that's  
20 something that we really are trying to improve  
21 on and it's not easy.

22 And this is a problem that even most

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1 epidemiologists have not accepted as something  
2 that they want to work on. So there's not a  
3 lot out there, but I think we, there's been a  
4 lot of progress in the last 50 years and we can  
5 apply some of that to our thinking on this.

6 So thank you and I'm looking forward  
7 to discussion questions, criticisms, thank you.

8 CHAIR MARKOWITZ: Thank you, Dr.  
9 Friedman-Jimenez.

10 MEMBER FRIEDMAN-JIMENEZ: Next slide  
11 please.

12 CHAIR MARKOWITZ: I thought that was  
13 terrific. Oh, good, you're done. Okay. I  
14 thought that was terrific. And highly relevant  
15 actually to the issue of hearing loss and  
16 solvent exposure.

17 I have a couple of, well actually  
18 just one very brief observation. You mentioned  
19 the OSHA standard for causation. Sounds very  
20 similar, cause, aggravate or contribute, to the  
21 standard that's in the Energy Compensation  
22 Program.

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1           So I just want to make that  
2 connection. Just a couple of questions for Mr.  
3 Vance because I can't remember in the hearing  
4 loss presumption, the Procedure Manual, it's  
5 only the occupational noise that counts. Is  
6 that right?

7           MR. VANCE: Yes, okay. So let me  
8 back everybody up and just explain it. Because  
9 if you can go back to that slide right before  
10 the end here.

11           CHAIR MARKOWITZ: By the way, purple  
12 is the color of NYU Langone Health so George  
13 had to use purple for this slide, just saying.

14           MR. VANCE: What I want -- let me  
15 just explain.

16           CHAIR MARKOWITZ: Yes.

17           MR. VANCE: So let's think of this as  
18 a line. Okay? And what our current procedure  
19 basically stipulates is we accept that hearing  
20 loss right now has an association with noise  
21 and toxic solvents. Okay?

22           The Board has looked at that in the

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1 past and has given us recommendations for added  
2 solvents and we have included those into the  
3 standard, but that line exists in our procedure  
4 that says, if you cross this line and the  
5 standard basically stipulates that if you  
6 worked in a job or had an exposure to a solvent  
7 and ten consecutive years of that exposure or  
8 that work.

9 And also works best to consistent  
10 levels of noise above 85 decibels, you cross  
11 that line, we're going to pay you so that the  
12 causality threshold has been satisfied.

13 We don't argue about aggravation or  
14 contribution. We just say you've crossed that  
15 epidemiological threshold for causality for the  
16 standard applied to our program which is very  
17 similar to the OSHA standard. All right?

18 So that first bullet point we are  
19 accepting that the reality exists. What would  
20 be particularly useful to the program and has  
21 been a point of contention are your second two  
22 bullet points.

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1           Very similar to what we were talking  
2 with Marek about on the Parkinsonism, the  
3 standard that we have and we shared this with  
4 the Board, but I will resend it, we have a  
5 white paper that was done that explained the  
6 literature and epidemiological research that  
7 was the source of the ten-year consecutive  
8 standard.

9           And so what our epidemiologist was  
10 looking at was the series of science that she  
11 thought was sufficiently probative,  
12 sufficiently weighted to say, yes, this is an  
13 established causal relationship.

14           But the studies were based on  
15 different analysis of duration of exposure. So  
16 you had some studies that would have looked at,  
17 you know, eight years of exposure to noise and  
18 solvent.

19           Other studies looking at ten years,  
20 12 years, what have you and so she was looking  
21 at all of the studies to come to a reason  
22 interpretation of like what would be the best

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1 temporal duration of exposure to establish that  
2 causal line? Ten years.

3 That's what it was so she said ten  
4 years. So on the second bullet, that's what we  
5 really need to focus on is that still  
6 representing a good standard of epidemiology  
7 that it requires for the confidence to meet  
8 that line, that threshold for compensability?

9 Is it ten years of consecutive  
10 exposure to noise and solvents or should it be  
11 something less because that would be more  
12 advantageous to our client population if you  
13 say, okay, we've looked at it.

14 And there's now available science or  
15 existing science that says it really should be  
16 eight years, five years or what have you. But  
17 as you know, I think and I've talked with our  
18 toxicologist about this, the science is pretty  
19 clear that there is a connection between  
20 solvent and noise exposure and hearing loss.

21 We know that. The debate for the  
22 program would be where to shift that line to.

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1 Is ten years of consecutive exposure  
2 appropriate or should it be less? Right?

3 CHAIR MARKOWITZ: Right.

4 MR. VANCE: Then the second point is  
5 very relevant as well because right now we're  
6 saying concurrent exposure to solvents and  
7 noises is the requirement and that's what our  
8 examiners would be looking for and establishing  
9 a viable hearing loss case.

10 So if you change that standard and  
11 say well it doesn't need to be concurrent, it  
12 can be five, eight years of solvent exposure  
13 and it can just be some period of high level  
14 decibel noise exposure.

15 So just keep in mind, you know, the  
16 program accepts that the causal connection  
17 exists. It's playing with the details that  
18 allows that line for compensability to shift.

19 So the focus should really be on  
20 that. I'll resend to Dr. Markowitz the  
21 analysis that we did that is sort of the basis  
22 for the ten-year standard that we applied, but

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1 from my understanding and my discussions with a  
2 toxicologist, it was.

3 She had identified different  
4 epidemiological literature and science, purity  
5 of science that basically was identifying  
6 different cohorts of people that they had  
7 studied for different periods of time.

8 And she felt that the ten year, you  
9 know, threshold was the most reasonable one  
10 based on the body of the epidemiology so if  
11 that is something the Board would look at and  
12 say well we think that's reasonable, but you  
13 could have also gone with this and it's a lower  
14 duration of exposure, I think the program would  
15 benefit from that.

16 And it would be an advantage for our  
17 claimants to take that from a ten year to  
18 something less. And that's what a lot of  
19 representatives and others are arguing that the  
20 standard's too conservative and it should be,  
21 should be lowered.

22 CHAIR MARKOWITZ: Thank you. So Ms.

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1 Rhoads, if you could just take note that either  
2 if it's been provided to us already, the  
3 references that were used to develop the  
4 original idea.

5 So just a couple of comments or  
6 questions. So one issue is according to the  
7 way you're presenting it, Dr. Friedman-Jimenez,  
8 it wouldn't have to be occupational noise  
9 exposure combined with occupational solvent  
10 exposure for it to be considered occupational  
11 because it would meet the aggravation or  
12 contribution standard. Right?

13 So the current presumption I think  
14 addresses only occupational noise exposure, but  
15 if people had which is very common, non-  
16 occupational noise exposure plus solvents then  
17 that should be considered occupational.

18 And that's, I'm sorry, that will be a  
19 question for the working group to address. The  
20 second question is there was some suggestion  
21 that if a person had exposure to multiple  
22 solvents that would increase the risk further

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1 above and beyond just a single solvent.

2 I'm talking about the solvents that  
3 are currently on the list. And so the question  
4 is whether the person had multiple solvent  
5 exposures toluene plus -- I can't remember the  
6 example that you had there.

7 Could that shorten the ten-year  
8 period? Could that increase in dose reduce the  
9 duration. And again, the question is, you  
10 know, is that addressed in the literature at  
11 all?

12 And then finally, I think you were  
13 suggesting that in the absence of noise  
14 exposure solvents alone could produce hearing  
15 loss.

16 And that's not addressed in the  
17 current program at least according to the  
18 presumption. And that would be a really  
19 interesting issue also for the working group to  
20 look at. All highly relevant.

21 One last comment, the issue of  
22 concurrent, you had to have the noise exposure

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1 at the same time as you had the solvent  
2 exposure. I'm very skeptical that they're  
3 going to be studies that shed light on that.

4 And so the concurrent becomes some  
5 sort of default assumption, not that it's been  
6 proven that it's necessary, but that in the  
7 program has become the default assumption.

8 And actually bringing studies or data  
9 to disprove that would be difficult, but at the  
10 same time I'm doubtful that they are actually  
11 studies that prove that you need that  
12 concurrent exposure.

13 So other members of the Board have  
14 comments or questions? I see the mic in the  
15 back, but just speaking to the Board members  
16 for the moment. Anybody else want to say  
17 anything? Dr. Bowman?

18 MEMBER BOWMAN: Yes, George, thank  
19 you for that presentation. I very much enjoyed  
20 that. And you had mentioned applying the "at  
21 least as likely as not" standard within this  
22 presentation you have ratios of odds, ratios in

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1 that.

2 Can you just, for the Board, clarify  
3 how that standard would be applied? Is it as  
4 simple as an odds ratio less than two is not  
5 "as least as likely as not" and the above is or  
6 can you talk to that?

7 MEMBER FRIEDMAN-JIMENEZ: This is a  
8 well-studied and still controversial topic  
9 that's been battered around in the epidemiology  
10 literature for half a century or more.

11 At least as likely or not is a legal  
12 tool to help us deal with the uncertainty  
13 that's inherent in we don't have the data.  
14 These things haven't been studied.

15 I agree with Dr. Markowitz that it's  
16 unlikely that we're going to find studies that  
17 shed a lot of light on these questions of  
18 duration of exposure, dose of exposure.

19 We don't have dose of exposure either  
20 for solvents or noise for each individual even  
21 at the level of the epidemiologic studies. I  
22 mean they were getting urine hippuric acid for

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1       toluene on every worker before and after shift  
2       for the epidemiology study.

3               They don't do that for your average  
4       worker. They just go to work and they work and  
5       they go home and so the exposures is not as  
6       well measured in real life as they are in the  
7       epidemiologic studies.

8               And the noise exposures, I mean they  
9       had a grueling care measurement microphone at a  
10      specified distance. This doesn't happen in  
11      real life in real work places.

12              So we're always going to have this  
13      level of uncertainty so you need a statistical  
14      way of dealing with that. So the more likely  
15      than not is the time tested legal approach to  
16      this.

17              And it's been much better developed  
18      in the B program of the radiation exposure  
19      program. They actually calculate what they  
20      call probability of causation.

21              But that's been criticized for  
22      mathematical reasons to the point that they

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1 backed off and some people call it assigned  
2 share because there's so many assumptions that  
3 you need to make and satisfy for the relative  
4 risk greater than two to translate into  
5 probability of causation greater than 50  
6 percent that it just, you can't meet those  
7 assumptions in real life studies and real life  
8 working populations.

9 So it comes down to and I think for  
10 the foreseeable future, even some of the  
11 Godparents of AI have predicted that we will  
12 always need an element of human judgment in  
13 making causation decisions that it cannot be  
14 done purely by the data.

15 That you have to assume things about  
16 confounders being uncorrelated and all kinds of  
17 mathematical assumptions. So bottom line is  
18 this is something that we trained physicians  
19 in. The CMCs have received training.

20 You know, whether they need to  
21 receive more training, we can't speak to that  
22 now because we haven't evaluated that, but most

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1 occupational physicians get some training in  
2 this.

3 Few are at a high statistical level  
4 that they really understand it. And, you know,  
5 this is just something that we need to have an  
6 evaluation and make some judgments. There's no  
7 gold standard.

8 It's not like a diagnostic test where  
9 you do a, you know, a chest x-ray and compare  
10 it with a CT and autopsy and see if you're  
11 right or wrong.

12 There's no objective right or wrong  
13 here that you can say in an individual. You  
14 know, maybe you guys in toxicology can find  
15 fingerprints of specific exposures, map out the  
16 pathway and then we'll know did the solvent  
17 cause this hearing loss or was it noise  
18 induced?

19 You know, was it the hair cells or  
20 some other cochlear location that's, that  
21 happens from solvents and not from noise? So  
22 this is a fundamental question.

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1           And it's one that is not going to be  
2 answered in my lifetime, but that we have the  
3 approach to and that approach, I think involves  
4 this kind of understanding of causation and  
5 then a judgment by a well-trained physician.

6           And the industrial hygienist are  
7 great, better than physicians at evaluating the  
8 exposure, but ultimately it comes down to the  
9 physician having to put together the exposure  
10 information, the family history, the medical  
11 history, the other diagnostic tests and  
12 everything to make a judgment.

13           What is the diagnosis and part of  
14 that diagnosis is what was the cause of this  
15 disease? And, you know, NIOSH has an approach,  
16 the six steps to doing a causation analysis  
17 and, you know, a lot of these concepts are  
18 fairly old and have been, there's been progress  
19 on this in the last fifty years that we're  
20 trying to put into the process.

21           So that's a long answer to your  
22 question. I'm sorry I couldn't give you a

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1 complete answer, but that's --

2 CHAIR MARKOWITZ: Yes.

3 MR. VANCE: -- about where we are.

4 CHAIR MARKOWITZ: But we,  
5 nonetheless, we are confident that the working  
6 group on hearing loss can find some answers.  
7 But we need to wrap this up so first I want to  
8 see if any other Board -- Dr. Cloeren? I see  
9 you there.

10 MEMBER CLOEREN: Yes, hi. Yes, I'm  
11 here. Good morning. I thought that was a  
12 great presentation, Dr. Friedman-Jimenez. I  
13 agree, Dr. Markowitz, with your comments about  
14 the solvents alone really needs to be explored.

15 There's not, it doesn't seem like  
16 there's a good reason for a requirement of  
17 noise exposure whether occupational or non-  
18 occupational.

19 So I think that's one of the things  
20 that we need to take a close look at.  
21 Regarding "at least as likely as not," I think  
22 we could try to compare with other presumptions

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1 that have been used.

2 And what the relative risk was for  
3 the other presumptive standards just to get an  
4 idea of precedent within the program.

5 CHAIR MARKOWITZ: Okay, thanks. I'm  
6 not going to comment on, I'm going to refrain  
7 from commenting on levels of relative risk.  
8 But I think, Mr. Vance, you maybe wanted to  
9 make a comment and then we need to close this  
10 out and move on.

11 MR. VANCE: Yes, let me be really  
12 quick. So just for the Board, be aware noise  
13 in and of itself is not considered an  
14 occupational toxic substance under our  
15 legislation.

16 So what Dr. Cloeren was just talking  
17 about is critically important. What you're  
18 looking at is the existing standard and you're  
19 trying to figure out if the science supports  
20 the liberalization of that standard.

21 So reducing the temporal duration of  
22 consecutive exposure looking at separating

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1 noise, the synergistic effect that's already  
2 established in this standard and saying as Dr.  
3 Cloeren suggests that could an occupational  
4 exposure to just the solvent have its own  
5 mechanistic effect on hearing loss?

6 So just keep in mind that what we're  
7 looking for is the focus on the existing  
8 standard of what could be done, if anything, to  
9 liberalize that standard and expand what the  
10 claims examiner would be looking for to  
11 establish that causal threshold.

12 And unlike other presumptive  
13 standards, this one is unique in the fact that  
14 either you meet the standard or you don't.  
15 There is no physician involvement in  
16 establishing the causative threshold.

17 The standard that exists in procedure  
18 is the standard for accepting that some  
19 occupational toxic substance combined with  
20 noise contributed aggravated or caused the  
21 hearing loss.

22 We would not go to a CMC to ask that

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1 question. The standard is basically a stand-  
2 alone causative threshold so.

3 CHAIR MARKOWITZ: All right, yes.  
4 Steve Markowitz. So I take that to mean that  
5 either you meet the presumptive standard and  
6 get compensated or if you don't meet that  
7 standard, there is no alternative route for  
8 analysis which I think is what was being  
9 suggested. Anyway, Dr. Friedman-Jimenez --

10 MEMBER FRIEDMAN-JIMENEZ: There is an  
11 alterative --

12 CHAIR MARKOWITZ: -- we normally give  
13 Mr. Vance the last word, but we'll yield it to  
14 you this time.

15 MEMBER FRIEDMAN-JIMENEZ: You  
16 basically have to challenge the standard and  
17 bring epidemiologic evidence. Each claimant  
18 that doesn't meet the presumption it says in  
19 the Procedure Manual has to bring a challenge  
20 to the procedure by bringing epidemiologic  
21 evidence supporting their case.

22 So it could be stated in a more user

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1 friendly way that they need to be evaluated by  
2 their own physician and by a CMC in a case-by-  
3 case evaluation looking at all of the evidence.

4 But how much of the tip of the  
5 iceberg the presumption cuts off isn't really  
6 important as long as you have a fall back that  
7 each person can be evaluated if they don't make  
8 the presumption in a way that it has a pretty  
9 good chance of finding causation if it's there  
10 and not finding if it's not there.

11 So we can talk more in the future  
12 about causation judgments made by physicians  
13 and how that works and what is each claimant's  
14 access to that because it sounds to me like  
15 there's some obstacles in how people get  
16 evaluated when they don't meet the presumption.

17 And that's really important because,  
18 you know, how many angels are dancing on the  
19 head of a pin? That's what we need to discuss  
20 if we don't have the data.

21 And we don't, we're not going to find  
22 the data I don't think that answered these key

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1 questions on precisely enough so I think it all  
2 will depend on the CMCs availability and  
3 accessibility for people that don't meet the  
4 presumptions.

5 CHAIR MARKOWITZ: Okay. Thank you.  
6 And we're going to use the user friendly term  
7 to segway into Site Exposure Matrices. And  
8 there's a, I think a recommendation or  
9 information request draft that's been penned  
10 overnight.

11 If we could bring that up on the  
12 screen and present it and discuss it. Kevin,  
13 you have that. Right? George, thank you very  
14 much. Okay, so you're going to have to make  
15 that, I think, Kevin, you're going to have to  
16 make it bigger.

17 We'll have to see only parts of it at  
18 a time is the best way and someone want --.  
19 Yes, that is that big enough for people to see?  
20 Okay. I think someone should verbally read it  
21 actually.

22 (Off-microphone comment.)

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1 CHAIR MARKOWITZ: We can alternate  
2 sentences if you want.

3 MEMBER SPLETT: The first  
4 recommendation is that the Board recommends  
5 that the Department of Labor inform and submit  
6 to the Board, in writing, a summary of any and  
7 all changes -- sorry, getting ahead.

8 When they receive those changes from  
9 the Department of Energy or any other source  
10 prior to and with each change to the public  
11 SEM, i.e., the internet-accessible SEM. Any  
12 Board members want to discuss?

13 CHAIR MARKOWITZ: So this envisions,  
14 this describes that, Steve Markowitz, that DOL  
15 is receiving information. Right? From DOE.  
16 And when DOL receives that information, that  
17 the Board is requests -- I'm just paraphrasing  
18 in order to understand it.

19 That the Board is requesting a  
20 summary of any of that information that would  
21 be used to alter the SEM.

22 MEMBER SPLETT: And it's not only

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1 from the Department of Energy, but from PTS.  
2 So any changes the Board would like to see it  
3 before it goes into the public SEM.

4 CHAIR MARKOWITZ: Okay, so for any  
5 other source, it would include PTS then?  
6 Right?

7 MEMBER SPLETT: Yes.

8 CHAIR MARKOWITZ: So we know that the  
9 PTS receives the data and developed and make  
10 the changes in the private SEM, you know, the  
11 in-house SEM. Right?

12 MEMBER SPLETT: Right.

13 CHAIR MARKOWITZ: And then it goes to  
14 a classification review and goes to the public  
15 SEM. So is this request asking it before it  
16 goes into the internal SEM or between the time  
17 of the internal SEM and the public SEM?

18 MEMBER SPLETT: Before the public SEM  
19 because I think the Board wants to make sure  
20 it's been classification reviewed before it's  
21 released to us.

22 CHAIR MARKOWITZ: Okay, so you know,

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1 I mean in order for the Board to take a look at  
2 it, we would have post --

3 MEMBER SPLETT: Right.

4 CHAIR MARKOWITZ: -- classification  
5 review. Okay, I get that. Thanks. All right,  
6 you know, we might just on the third line add  
7 "after classification review" just to be  
8 specific about that.

9 MEMBER SPLETT: Kevin, could you do  
10 that?

11 MEMBER VLAHOVICH: Yes, where are you  
12 looking at?

13 (Off-microphone comment.)

14 CHAIR MARKOWITZ: Yes, before the  
15 "prior" to say prior to, I mean after  
16 classification review before the word "prior."

17 MEMBER CLOEREN: I would do it by  
18 submit to the Board after classification.  
19 Maybe that would make it more clear. In the  
20 very first line.

21 CHAIR MARKOWITZ: Yes.

22 MEMBER CLOEREN: Maybe submit to the

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1 Board and maybe prefaces after classification  
2 review.

3 MEMBER SPLETT: Okay.

4 MEMBER BOWMAN: Yes.

5 MEMBER SPLETT: That's good.

6 CHAIR MARKOWITZ: And so this is a  
7 request of the summary of the changes or a  
8 listing of the changes? That's a question to  
9 the, to the, to whoever will listen actually I  
10 guess.

11 MEMBER KEY: Yes, Jim Key. Not a  
12 summary, but a complete listing, in order for  
13 us to understand what those changes are being  
14 made and not after the fact.

15 CHAIR MARKOWITZ: Does that mean you  
16 want to change the word summary to listing? Is  
17 that what that means? I don't have a view.  
18 I'm just raising the question to clarify.

19 (Off-microphone comment.)

20 MEMBER WHITTEN: Yes, I agree. We  
21 should change that word to list.

22 CHAIR MARKOWITZ: So you know when we

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1 endorse, we vote on recommendations. We don't  
2 really change the language of the  
3 recommendations.

4 We then write up a rationale where we  
5 can describe it so it's kind of important we  
6 get the language that we want in the  
7 recommendation that we vote upon.

8 MEMBER CLOEREN: So to make it read  
9 better, I wonder if we should say something,  
10 instead of when they receive a list of changes,  
11 maybe when they receive such information from  
12 the Department of Energy or other source.

13 Does that make sense? I wonder how  
14 this can actually be done. Like I wonder if  
15 this is too broad of and I don't know what all  
16 may be coming in.

17 And I think what we're really asking  
18 for here is if Paragon receives information  
19 that's going to result in changes to the SEM  
20 that, you know, that we take a look that, you  
21 know, we'll be able to take a look at it before  
22 it does public. That's the intent of this?

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1                   MEMBER SPLETT:     Yes, that is the  
2     intent.

3                   MEMBER CLOEREN:    So as written, I  
4     don't know that this conveys that.

5                   CHAIR     MARKOWITZ:         So,     Steve  
6     Markowitz, just the request is not to access  
7     the underlying documents that are, that underly  
8     the changes. Right? It's --

9                   MEMBER CLOEREN:    Yes. I think that's  
10    the --

11                  CHAIR MARKOWITZ:   -- it's the result  
12    and changes in the SEM. That's what the target  
13    is here. Right?

14                  MEMBER BOWMAN:    Correct.

15                  MEMBER CLOEREN:    So I think maybe  
16    what we're really asking for is documentation  
17    of changes that are made in the internal SEM so  
18    that they could be reviewed, you know, along  
19    with kind of the reason or those changes so  
20    that those can be reviewed before they get  
21    incorporated in the public zone.

22                  CHAIR MARKOWITZ:   Steve Markowitz. I

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1 don't think they've undergone classification  
2 review.

3 MEMBER CLOEREN: Well let's say --  
4 (Simultaneous speaking.)

5 CHAIR MARKOWITZ: For the internal --

6 MEMBER CLOEREN: -- classification,  
7 yes. Because I worry that the way this is  
8 written, it might be that it looks like we're  
9 asking for all these sort of documents of maps  
10 and documents of this building to begin that  
11 and, you know, that kind of thing.

12 I don't know that that's practical  
13 for us, you know, a) to need it, and b) to  
14 review it.

15 CHAIR MARKOWITZ: Question for Mr.  
16 Vance. The classification review occurs after,  
17 between the internal SEM and the public SEM in  
18 terms of time.

19 MR. VANCE: Correct. So on May 16th,  
20 what they're going to do is they're going to  
21 freeze the internal Site Exposure Matrices.  
22 That will go and they'll report that to the

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1 Department of Energy at which time they'll do  
2 the classification review for the release of  
3 that information that will encompass existing  
4 information or any changes that have occurred  
5 since the last freeze.

6 MEMBER SPLETT: I think part of the  
7 intent was that the Board would be looking at  
8 what has changed whether it's every six months  
9 so that we can see the volume and the types of  
10 things that are being changed because as of  
11 now, that is invisible to the Board. Mr. Key,  
12 would you agree with that?

13 MEMBER KEY: Yes.

14 MEMBER BOWMAN: On the wording too,  
15 accomplish that goal. We say list of any and  
16 all changes. I think we mean changes, of  
17 course, to the SEM. Right? And --

18 MEMBER KEY: Yes.

19 MEMBER BOWMAN: So it's any changes  
20 to the SEM. It doesn't matter the source in  
21 some sense so could we drop "when they receive  
22 such information from the DOE or the other

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1 source?"

2 Change it to the ten prior to and  
3 with each change in the public SEM.

4 MEMBER SPLETT: We just didn't want  
5 to limit it just from things from the  
6 Department of Energy. It was also the things  
7 that Paragon was putting in as well as the  
8 things that they received --

9 MEMBER BOWMAN: Right.

10 MEMBER SPLETT: -- from DOE or public  
11 sources or PTS. But I'm --

12 CHAIR MARKOWITZ: So to the SEM,  
13 maybe -- sorry, maybe then changes to the SEM -  
14 -

15 MEMBER SPLETT: Yes, we could take  
16 that whole section out.

17 CHAIR MARKOWITZ: Yes, the "any other  
18 source" includes Paragon includes the public  
19 SEM mailbox. Right? So --

20 MEMBER SPLETT: Correct.

21 MEMBER BOWMAN: It says all changes  
22 so that would be, if it's all changes it has to

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1 be all sources.

2 MEMBER SPLETT: All sources, yes.

3 MEMBER BOWMAN: So I'd propose that  
4 the highlighted region that Kevin highlighted  
5 be deleted, but before it gets delete, because  
6 we lose it? That picture.

7 MEMBER SPLETT: I think as long as we  
8 all recognize that any changes are from DOE  
9 outside and Paragon. I don't have any issue  
10 with deleting that, make it less wordy.

11 MEMBER BOWMAN: And that would go  
12 into the justification anyway.

13 MEMBER WHITTEN: Do we want to say  
14 changes slash updates?

15 CHAIR MARKOWITZ: Changes would  
16 encompass updates.

17 MEMBER WHITTEN: Okay.

18 CHAIR MARKOWITZ: So changes is  
19 broader, so.

20 MEMBER BOWMAN: We might want to  
21 describe what we mean by list. Do we want to a  
22 justified list? Do we want a -- what is a

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1 list?

2 CHAIR MARKOWITZ: Steve Markowitz. I  
3 mean, I would interpret that as a description,  
4 you know, of it was this and we're changing it  
5 to that.

6 MEMBER BOWMAN: And --

7 CHAIR MARKOWITZ: Without a  
8 rationale. Just description of what they're  
9 doing.

10 MEMBER SPLETT: Right. And if  
11 anybody on the Board had a specific question  
12 that could be addressed to the Department of  
13 Labor if there was a particular item that was  
14 in question.

15 CHAIR MARKOWITZ: All right so do you  
16 want to move on? Unless there are other  
17 comments or suggestions here, should we move on  
18 to the next paragraph?

19 MEMBER SPLETT: We can. I didn't  
20 know if you wanted to vote on each one  
21 separately, but we can do them all at the same  
22 time if that's what you prefer.

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1 CHAIR MARKOWITZ: Well can't see the  
2 bottom here. Are they, are all of them  
3 recommendations? Are some of them information  
4 requests?

5 MEMBER SPLETT: The second one is  
6 another information request and the third one  
7 is a request for the meetings between Paragon  
8 and members of the Board to continue.

9 CHAIR MARKOWITZ: Yes, oh I guess  
10 it's simpler if we just vote on each one  
11 separately.

12 MEMBER SPLETT: Okay.

13 CHAIR MARKOWITZ: So that we feel  
14 more accomplished.

15 MEMBER CLOEREN: Can we fix the typo?

16 CHAIR MARKOWITZ: Yes.

17 MEMBER CLOEREN: In the second  
18 paragraph. Please.

19 PARTICIPANT: Yes.

20 CHAIR MARKOWITZ: So we're going to  
21 just looking at the first one then we're going  
22 to -- any additional comments or questions

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1 about that before we take a vote on that?

2 Okay.

3 MR. JANSEN: I'll record the vote.

4 Dr. Bowman?

5 MEMBER BOWMAN: Yes.

6 MR. JANSEN: Mr. Catlin?

7 MEMBER CATLIN: Yes.

8 MR. JANSEN: Dr. Cloeren?

9 MEMBER CLOEREN: Yes.

10 MR. JANSEN: Dr. Friedman-Jimenez?

11 MEMBER FRIEDMAN-JIMENEZ: Yes.

12 MR. JANSEN: Dr. Markowitz?

13 CHAIR MARKOWITZ: Yes.

14 MR. JANSEN: Dr. Mikulski?

15 MEMBER MIKULSKI: Yes.

16 MR. JANSEN: Dr. Vlahovich?

17 MEMBER VLAHOVICH: Yes.

18 MR. JANSEN: Mr. Key?

19 MEMBER KEY: Yes.

20 MR. JANSEN: Ms. Splett?

21 MEMBER SPLETT: Yes.

22 MR. JANSEN: Ms. Whitten?

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1 MEMBER WHITTEN: Yes.

2 MR. JANSEN: Mr. Domina?

3 MEMBER DOMINA: Yes.

4 MR. JANSEN: There are 11 yes votes  
5 and zero no votes.

6 CHAIR MARKOWITZ: Okay, so the next  
7 one, you know, the Board requests the  
8 Department of Labor direct their contractor  
9 currently PTS to prospectively.

10 And retrospectively restore  
11 traceability of any chemicals and L-A-B labor -  
12 - you could add O-R to that word, labor  
13 categories that are slash were removed from the  
14 SEM with documentation for the rationale for  
15 their removal. The floor is open for comments,  
16 questions.

17 MEMBER CLOEREN: Marianne Cloeren  
18 here. I think what we mean with documentation  
19 for rationale would be at the SEM that there be  
20 some kind of statement and public SEM  
21 explaining the rationale, not just providing  
22 the rationale to the Board.

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1 CHAIR MARKOWITZ: I'm sorry could you  
2 repeat that? You didn't come through entirely.

3 MEMBER CLOEREN: I think the very  
4 last line with documentation for the rationale  
5 for the removal. I think the intent there is  
6 that the SEM would have a statement providing  
7 such document, explaining the rationale.

8 It's not really clear what  
9 documentation for the rationale is where that  
10 documentation would go? Is that coming to the  
11 Board? I think the intent is that the SEM  
12 would include a statement explaining rationale.

13 MEMBER SPLETT: You are correct.  
14 That is what the intent was that these  
15 chemicals were removed because they were rolled  
16 up into this other chemical or this labor  
17 category was separated into these three other  
18 labor categories that the traceability would be  
19 in the SEM, easy for folks to claimants and  
20 claims examiners and authorized representatives  
21 to understand not for that to be provided to  
22 the Board.

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1           But for it to be clearly understood  
2 and located in the SEM. You're absolutely  
3 right.

4           MEMBER CLOEREN: So I think we need  
5 to wordsmith that with documentation for the  
6 rationale for the removal allowing a public  
7 statement in this SEM or provided --

8           MEMBER BOWMAN: The third word from  
9 the end, what about with documentation for the  
10 rationale of their removal in the SEM?

11           MEMBER SPLETT: And I think it's not  
12 just the removal, it's sometimes it's their  
13 segregation. And we go back to the example  
14 that we used yesterday about the labor and the  
15 groundskeeper.

16           There weren't removed. They were  
17 separated, but it appeared that they were  
18 removed from the labor, the toxics, but they  
19 were actually separated. Which is that  
20 documentation so there's --

21           MEMBER BOWMAN: With rationale for  
22 the documentation of the change?

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1 MEMBER SPLETT: Yes, that's probably  
2 better.

3 MEMBER BOWMAN: Of the change in the  
4 SEM.

5 MEMBER SPLETT: That's good, Aaron.

6 MEMBER WHITTEN So do we want to  
7 change the word removed from the SEM then  
8 because they weren't removed, they're still in  
9 there. They're just --

10 (Off-microphone comment.)

11 MEMBER WHITTEN: -- modified. Yes,  
12 that's a good word. Reclassified, re-  
13 segregated. I don't know, what do you think?

14 MEMBER CLOEREN: Removed or moved?  
15 Removed from or moved within?

16 MEMBER BOWMAN: Could we just say  
17 altered?

18 MEMBER WHITTEN: Yes, I like that.

19 MEMBER CLOEREN: And then it would be  
20 "in." I'm going to have some fun with  
21 prepositions. So I don't want to disagree with  
22 you. I think the last line should say with

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1 documentation of the rationale for the change.  
2 So I would switch those prepositions.

3 MEMBER BOWMAN: I concur.

4 CHAIR MARKOWITZ: This is Steve  
5 Markowitz. To me this sounds like an enormous  
6 task that we're asking because if you apply  
7 this retrospectively, we're talking about I  
8 think this SEM went operational in 2006.

9 So you're talking about, I'm sorry  
10 when was -- you want to correct me? Sure.

11 MEMBER DOMINA: Well the public SEM,  
12 we didn't get that until what, '12, '13? You  
13 know, it was way later. We didn't even know it  
14 existed.

15 CHAIR MARKOWITZ: Okay. The, so  
16 maybe, I don't know when the original, you  
17 know, internal SEM was so even if it's back to  
18 2012, it still strikes me as an enormous task  
19 to go back 12 or more years.

20 And describe for individual toxins  
21 and for labor categories, what changes were  
22 made and the basis for those changes. I mean,

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1 if it exists, and you know, if it was routinely  
2 done and it merely needs to be compiled, you  
3 know, and shared with us, then that doesn't  
4 sound like such a big deal.

5 But if it hasn't been done, then I'm  
6 skeptical that it could be done, but you know,  
7 it -- I guess there's no harm in asking. I do  
8 wonder whether, you know, the PTS is a  
9 contractor, the contract says certain things.

10 You know, it sets out the tasks  
11 thinking that this might not be a task in the  
12 contract is whether, you know, we're just going  
13 to get a response from DOL that well, you know,  
14 it's not in the contract, we can't do that.

15 MEMBER SPLETT: One of the things we  
16 looked at as the ownership of records clause  
17 and the requirement to fall all national  
18 archives and records administration  
19 requirements which includes documenting any  
20 changes to the SEM.

21 So they should have it somewhere. If  
22 they don't that would be very disturbing that

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1 they're making changes without documenting as  
2 required by federal law.

3 CHAIR MARKOWITZ: Okay. So let's  
4 just focus for a moment on the term restore  
5 traceability. What exactly are we asking them  
6 to do, restore into the public SEM?

7 MEMBER SPLETT: I think that was our  
8 intent.

9 CHAIR MARKOWITZ: Okay, then I think  
10 we might need to be more explicit.

11 MEMBER SPLETT: And I do think this  
12 is one of the reasons that there is a lot of  
13 unfortunately distrust to the SEM in the  
14 claimant community because they see things  
15 moving.

16 And changing the numbers changing,  
17 the job titles changing with no documentation  
18 even if it's just a footnote. And I do think  
19 that's one of the root causes.

20 I'm looking at the other members, Mr.  
21 Key and Mr. Whitten, Ms. Whitten, excuse me.  
22 If that is not, do you not agree that that's

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1 one of the issues with the perception?

2 MEMBER WHITTEN: Yes, definitely.

3 MEMBER KEY: Yes, so it is one of the  
4 issues and also when we became aware of the  
5 information being moved from the SEM, no Board  
6 Member was apprised of prior and we questioned  
7 that.

8 The subcontractor says well we have  
9 that information, it's in another database, but  
10 you don't have access to it. So that's the  
11 reason why this needs to be performed.

12 MEMBER CLOEREN: I recommend we  
13 consider dissecting this into two requests  
14 because I agree with Dr. Markowitz that the  
15 first one may not be, may not be feasible.

16 But the second part is really  
17 important and I think that, you know, providing  
18 not just documentation of the rationale for the  
19 change, but kind of instructions on how to find  
20 what the heck you're looking for.

21 You know, if this changed, if you're  
22 looking for this, this is where it is now and

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1 this is the reason or it. You know, some kind  
2 of simple instructions and explanation in the  
3 SEM.

4 MEMBER SPLETT: So are you suggesting  
5 separating the chemicals from the labor  
6 categories or just --

7 MEMBER CLOEREN: No, I'm suggesting  
8 separating the perspective and retrospective  
9 traceability restoration request from the  
10 request to provide some instructions and  
11 documentation of changes so that people can  
12 find what they're looking for.

13 MEMBER SPLETT: So one looking ahead  
14 and one looking --

15 MEMBER CLOEREN: Yes.

16 MEMBER SPLETT: -- retrospectively at  
17 --. I got you.

18 MEMBER CLOEREN: I don't know if I  
19 disagree, but I think that it should be easy  
20 enough to provide some instructions and  
21 documentation like you may see some changes and  
22 this is where to go look for it.

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1           These are reasons for it and this is  
2           how to look for what you'll conform. I'm not  
3           sure, maybe that isn't easy. You know, maybe  
4           there's so many changes that I think --

5           MEMBER CLOEREN: I do think Dr.  
6           Markowitz's point is well taken that going  
7           backwards, it may be much more difficult than  
8           it is saying as it is as of, you know, October  
9           1st to whatever, we're going to follow this  
10          process. So maybe those should be separated  
11          for a DOL --

12          MEMBER SPLETT: So the point --

13          MEMBER CLOEREN: -- for DOL to  
14          provide two separate answers. One is, you  
15          know, looking forward, we'll do this or if  
16          whatever they're going to say, but  
17          retroactively that's much more difficult.

18          CHAIR MARKOWITZ: Yes. Dr. Bowman?

19          MEMBER BOWMAN: If we within the same  
20          paragraph, you could add a second sentence to  
21          address the retrospective part so we could see  
22          in a two respectively enable traceability of

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1 any chemical blah, blah, blah that are altered  
2 in the SEM.

3 And then the Board could also request  
4 an analysis of the feasibility of taking this  
5 action to past changes. And we can get a  
6 report on that feasibility and make a decision.

7 We might want to, if there's a -- if  
8 it is in fact an onerous task, the Board may  
9 decide that certain types of changes would take  
10 priority and would maybe recommend those  
11 changes get priority.

12 But until we have a feasibility, a  
13 sense of that feasibility, we might not know  
14 the scope to which we could reasonably  
15 recommend.

16 CHAIR MARKOWITZ: That, Steve  
17 Markowitz, that could go in the rationale if  
18 need be. Well, I'm, or it could be the  
19 language could be altered here. I'm not taking  
20 a position.

21 But I'm still stuck on the restore  
22 traceability. I'm not sure what -- I think

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1       there needs to be more specificity in what's  
2       being, you know, requested here or advised.  
3       Because I'm not sure it was traceable.

4                   MEMBER SPLETT:  You know, and --

5                   CHAIR MARKOWITZ:  I'm not sure what's  
6       being restored, but --

7                   MEMBER SPLETT:  I think one of the  
8       things that we had talked is if one and again,  
9       going back to the labor and grounds keeper, if  
10      in the labor category there was an asterisk  
11      that said grounds keeper with this 43 toxins  
12      were moved to a standalone category, that's  
13      enough.

14                   I mean, that's enough for somebody  
15      looking at that labor category to know that  
16      something has changed.

17                   CHAIR MARKOWITZ:  So do you mean  
18      instead of restore traceability, identify  
19      changes?  If you would substitute identify  
20      changes.

21                   MEMBER BOWMAN:  Yes, I think that  
22      could work, but the phrasing of traceability is

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1 intended to refer back to the sense that  
2 someone knows and remembers this was there, now  
3 it's gone.

4 So provide some trace to what  
5 happened.

6 CHAIR MARKOWITZ: I see.

7 MEMBER BOWMAN: That's the intent of  
8 that word choice, but for clarity, I think for  
9 this statement, we could say that we could use  
10 the word traceability perhaps in the  
11 justification to talk about the intent and the  
12 purpose of this.

13 So I would think potentially the  
14 suggestion, Steven, that you just made would be  
15 okay.

16 PARTICIPANT: I agree.

17 PARTICIPANT: And maybe take restore  
18 and just put provide traceability so make it  
19 more proactive instead of just --

20 MEMBER BOWMAN: Yes.

21 MEMBER SPLETT: Because there never  
22 was traceability for what members of the public

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1 want the Board could see. Clearly within  
2 Paragon and I assume the Department of Labor,  
3 they had some of that traceability.

4 But for those of us on the IAS side  
5 that wasn't there. Ms. Whitten, do you --

6 MEMBER WHITTEN: Correct. Meeting  
7 with them in person when they -- this is Dianne  
8 Whitten. When they explained that a lot of the  
9 chemicals that we noticed were missing were  
10 missing because of that report, Institute of  
11 Medicine Report that came out.

12 So if that's the reason why most of  
13 the chemicals have been moved, I think it would  
14 be easy enough for them to denote that on the  
15 SEM somewhere. But that's the reason.

16 CHAIR MARKOWITZ: Steve Markowitz,  
17 what we don't really know whether, you know,  
18 that conversion from constituents to mixtures  
19 occurred 2013, 2014, whether that was, you  
20 know, the only time or even the major time when  
21 what's being described here occurred so.

22 I'm sorry, there was a suggestion

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1 with to substitute something for the word  
2 restore.

3 MEMBER BOWMAN: Yes, the suggestion  
4 was --

5 MEMBER WHITTEN: Identify changes, is  
6 that what you said?

7 MEMBER BOWMAN: To prove --

8 PARTICIPANT: To provide instead of  
9 restore, to provide.

10 CHAIR MARKOWITZ: Oh, provide. Okay,  
11 so is that friendly amendment accepted by the -  
12 - okay, so Kevin if you could just change the  
13 word "restore" to "provide."

14 MEMBER BOWMAN: Instead of  
15 traceability, Steven, would to provide notation  
16 of any chemical or labor categories because I  
17 mean what you're asking for is a note.

18 MEMBER SPLETT: I mean clearly that's  
19 the intent is that somebody looking at the IAS  
20 could find out why something changed without  
21 having to, there's no other way for them to  
22 know it if it's not noted.

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1 I go back to labor or grounds keeper.  
2 All it would take is a note, groundskeeper  
3 moved to a separate labor category with 43  
4 toxic materials going with it.

5 MEMBER BOWMAN: So then I'm to, so  
6 provide notation of any chemical labor category  
7 would, in fact, encompass what's --

8 MEMBER SPLETT: Yes. Explanation?

9 MEMBER BOWMAN: Explanation works  
10 too.

11 CHAIR MARKOWITZ: I don't know,  
12 explanation is the rationale. I think what  
13 your, the traceability issue is the  
14 description. This was there, now it's no  
15 longer there. Something else appears.

16 This was moved, that kind of  
17 information. So provide notation of any  
18 changes. Right? That's what is being  
19 requested.

20 MEMBER WHITTEN: Correct.

21 CHAIR MARKOWITZ: So after "notation"  
22 I would then add "of any changes" in. Yes.

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1       Actually it should be, I think it should say  
2       toxic substances not chemicals. But that's the  
3       term that's used.

4                   MEMBER WHITTEN:   Yes, true.  Should  
5       it say the Board recommends Department of Labor  
6       direct or are we good with the word request?  I  
7       think we should put recommend there.  You guys  
8       --

9                   CHAIR MARKOWITZ:   You know we're  
10      purely advisory so --

11                   MEMBER BOWMAN:   Yes.

12                   CHAIR MARKOWITZ:  -- everything we do  
13      is a recommendation.

14                   MEMBER WHITTEN:   Right.

15                   (Off-microphone comment.)

16                   CHAIR MARKOWITZ:   So you probably  
17      should change the request to recommend so it's  
18      --

19                   PARTICIPANT:   Yes.

20                   MEMBER CATLIN:   Okay.  And are we  
21      asking for only the changes to toxic substances  
22      and labor categories or are we actually looking

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1 for the --

2 MEMBER BOWMAN: In the discussion of  
3 the --

4 MEMBER CATLIN: -- at all to --

5 MEMBER BOWMAN: -- in discussion of  
6 the working group, those two examples, the  
7 toxic substances and labor categories were the  
8 most important.

9 MEMBER CATLIN: Okay.

10 MEMBER BOWMAN: That came out and so  
11 this is already a very scoping request.

12 MEMBER CATLIN: Okay.

13 MEMBER BOWMAN: Right. Yes.

14 MEMBER CATLIN: Well, yes.

15 MEMBER BOWMAN: I'm not sure the  
16 second any is needed of any changes to, you can  
17 drop that any of the toxic because it's already  
18 any changes.

19 CHAIR MARKOWITZ: Okay, last comments  
20 or suggested changes.

21 MEMBER WHITTEN: Well, that was a  
22 good --

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1                   MEMBER VLAHOVICH:    Should Board be  
2                   capitalized?

3                   MEMBER WHITTEN:  Oh, sorry.  That was  
4                   a good point about the other filters to really  
5                   take that into consideration when we were  
6                   looking at this.

7                   But the facilities, work processes,  
8                   those have been issues too.

9                   CHAIR MARKOWITZ:  So the creators of  
10                  this recommendation that the suggestion is that  
11                  you add to the toxic which is labor category's  
12                  work processes.  So do you want to do that?

13                  MEMBER SPLETT:  I agree.  These were  
14                  the two big ones where the toxic substance and  
15                  labor categories, but while we're getting  
16                  recommendations, we might as well add all the  
17                  things that we were concerned about.

18                  CHAIR MARKOWITZ:  Mr. Domina?

19                  MEMBER DOMINA:  Kirk Domina.  When we  
20                  met with Paragon, they bought up work processes  
21                  and so they're the ones that brought it up.  I  
22                  think it should be put in there.

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1 CHAIR MARKOWITZ: Okay.

2 MEMBER SPLETT: Yes, I agree.

3 MEMBER BOWMAN: So you put a comma  
4 after substances and put work product.

5 MEMBER WHITTEN: So do we want to add  
6 facilities too?

7 MEMBER KEY: Yes. Do it all.

8 MEMBER WHITTEN: I mean, that's the  
9 majority of the filters that we use, claims  
10 examiners use I believe.

11 CHAIR MARKOWITZ: Yes. Okay,  
12 additional comments, suggestions? Okay, then  
13 let's take a vote. I'm going to quickly read  
14 this just so in case anybody's on the phone and  
15 can't see it.

16 The Board recommends that Department  
17 of Labor direct their contractor currently PTS  
18 to prospectively and retrospectively provide  
19 notation of any changes to toxic substances  
20 labor categories, facilities and work processes  
21 that are slash were altered in the SEM with  
22 documentation of the rationale for the change

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1 in the SEM. Okay? All right. Take a vote.

2 MR. JANSEN: I'll record the vote.

3 Dr. Bowman?

4 MEMBER BOWMAN: Yes.

5 MR. JANSEN: Mr. Catlin?

6 MEMBER CATLIN: Yes.

7 MR. JANSEN: Dr. Cloeren?

8 MEMBER CLOEREN: Yes.

9 MR. JANSEN: Dr. Friedman-Jimenez?

10 MEMBER FRIEDMAN-JIMENEZ: Yes.

11 MR. JANSEN: Dr. Markowitz?

12 CHAIR MARKOWITZ: Yes.

13 MR. JANSEN: Dr. Mikulski?

14 MEMBER MIKULSKI: Yes.

15 MR. JANSEN: Dr. Vlahovich?

16 MEMBER VLAHOVICH: Yes.

17 MR. JANSEN: Mr. Key?

18 MEMBER KEY: Yes.

19 MR. JANSEN: Ms. Splett?

20 MEMBER SPLETT: Yes.

21 MR. JANSEN: Ms. Whitten?

22 MEMBER WHITTEN: Yes.

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1 MR. JANSEN: Mr. Domina?

2 MEMBER DOMINA: Yes.

3 MR. JANSEN: There are 11 yes votes  
4 and zero no votes.

5 CHAIR MARKOWITZ: Okay, we're going  
6 to take a seven-minute break because we're a  
7 half hour late for our break. So well, it's  
8 10:15 a.m. Let's come back here a little bit  
9 after 10:20 a.m.

10 (Whereupon, the above-entitled matter  
11 went off the record at 10:15 a.m. and resumed  
12 at 10:24 a.m.)

13 CHAIR MARKOWITZ: Okay, so let's go  
14 back to where we were looking at. We're  
15 missing Mr. Key. He knows we're and who else?  
16 I think that's it. And Dr. Cloeren, you're  
17 there?

18 MEMBER CLOEREN: I am.

19 CHAIR MARKOWITZ: Okay, great. Okay.  
20 So let's go back because I think there was a  
21 third recommendation in that set and by the  
22 way, by way of warning, we'll move on to the

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1 industrial hygiene recommendation is next.

2 Okay, so the third, let me read it.  
3 The Board requests that DOL continue the in-  
4 person meetings with PTS or the current  
5 contractor for the SEM with members of the  
6 Board's SEM subcommittee on our routine basis  
7 and in person up to three times a year to  
8 discuss ongoing improvements of the SEM. The  
9 floor is open for discussion.

10 MEMBER WHITTEN: This is Dianne  
11 Whitten. Can we change it from request to  
12 recommend please, Kevin? Thank you.

13 (Off-microphone comment.)

14 CHAIR MARKOWITZ: Oh, I'm sorry.

15 MEMBER DOMINA: Kirk Domina. When we  
16 met with Paragon at the end of March there in  
17 Columbus, it was very, it was a very good  
18 meeting.

19 It was very helpful for both sides  
20 and I think that we can quicker take care of  
21 some of these problems that the claimant  
22 community sees because this is one of the,

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1 about the major tool that they have to work  
2 with when they get something back requesting  
3 more information or whatever.

4 But some of these problems have been  
5 fundamentally wrong for a long time, and you  
6 know, like some of the two prior ones, part of  
7 the reason is, I mean, and if you go back and  
8 look at some of the meeting minutes from '17  
9 and '18, when I talked about Ms. Whitten's job  
10 category, not even being listed where anybody  
11 knows that Radcon is first in, last out for 75  
12 plus years at that point in time.

13 And then all of a sudden the job  
14 category shows up in there with over 2,100  
15 chemicals. I mean there's some fundamental  
16 stuff that and then the reactor stuff for  
17 Hanford is not the experimental ones.

18 It was all the production reactors  
19 and anybody knows anything about history and so  
20 that stuff not getting changed until late in  
21 the ballgame for lack of a better term, is the  
22 reason that we want to meet with them up to

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1 three times a year because it's helpful for  
2 both sides.

3 They see issues that they want us to  
4 help them with and we see issues that we need  
5 their help with.

6 CHAIR MARKOWITZ: Yes, Ms. Splett?

7 MEMBER SPLETT: First, kudos to  
8 Paragon and DOL. It was a very positive  
9 meeting. A lot of things that we had issues  
10 with at least we then understood the basis of  
11 those.

12 I think it was a really meaningful  
13 exchange and hopefully can be continued.

14 CHAIR MARKOWITZ: Steve Markowitz.  
15 You know, I having been on the Board for eight  
16 years, this -- my view is this has been the  
17 most productive period of discussion about the  
18 SEM that we've ever had.

19 And I think in part is the, the visit  
20 you all made to PTS in Ohio and I'd point out  
21 that, you know, in the charter or the described  
22 tasks set out for the Board, the number one is

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1 the SEM.

2 It is looking at helping in the SEM  
3 because that's always been a focus of interest  
4 by the public and a source of questions and  
5 sometimes even dissatisfaction so I think  
6 there's momentum here.

7 And I think it's good and we should  
8 continue it. Now three times a year visiting  
9 Hilliard, Ohio --

10 MEMBER SPLETT: And I do think the  
11 mix of the people who went was I think Dr.  
12 Cloeren's input was really, really valuable. I  
13 think having a mix of members of the Board was  
14 really valuable as well.

15 CHAIR MARKOWITZ: Are you suggesting  
16 that we amend the language to include a  
17 requirement that Dr. Cloeren attend all  
18 meetings?

19 MEMBER SPLETT: I am totally there.

20 CHAIR MARKOWITZ: Only kidding, only  
21 kidding, Dr. Cloeren. Okay.

22 MEMBER CLOEREN: I vote no.

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1 CHAIR MARKOWITZ: Any further  
2 discussion, comments specifically on the  
3 language here? Which is pretty clear I would  
4 say. Okay, then I think we're ready for a  
5 vote.

6 MR. JANSEN: I'll record the vote.  
7 Dr. Bowman?

8 MEMBER BOWMAN: Yes.

9 MR. JANSEN: Mr. Catlin?

10 MEMBER CATLIN: Yes.

11 MR. JANSEN: Dr. Cloeren?

12 MEMBER CLOEREN: Yes.

13 MR. JANSEN: Dr. Friedman-Jimenez?

14 MEMBER FRIEDMAN-JIMENEZ: Yes.

15 MR. JANSEN: Dr. Markowitz?

16 CHAIR MARKOWITZ: Yes.

17 MR. JANSEN: Dr. Mikulski?

18 MEMBER MIKULSKI: Yes.

19 MR. JANSEN: Dr. Vlahovich?

20 MEMBER VLAHOVICH: Yes.

21 MR. JANSEN: Mr. Key?

22 MEMBER KEY: Yes.

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1 MR. JANSEN: Ms. Splett?

2 MEMBER SPLETT: Yes.

3 MR. JANSEN: Ms. Whitten?

4 MEMBER WHITTEN: Yes.

5 MR. JANSEN: Mr. Domina?

6 MEMBER DOMINA: Yes.

7 MR. JANSEN: There are 11 yes votes  
8 and zero no votes.

9 CHAIR MARKOWITZ: You know, it's  
10 shocking how little conflict there is among the  
11 Board members. And I think actually when we  
12 resolve the differences in discussion sometimes  
13 offline, but in any case, let's move on to the  
14 industrial hygiene subcommittee.

15 I think there's some, oh, yes, so no,  
16 we don't review the rationale here. That takes  
17 way too long. That rationale is drafted  
18 usually by the people who write up the  
19 recommendation and it could be sent, it's sent  
20 around to Board members to amend.

21 But we do that after the meeting.  
22 Okay, so Kevin, you have that, you have those.

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1 MEMBER VLAHOVICH: Right.

2 CHAIR MARKOWITZ: Right? Yes.

3 MEMBER CLOEREN: Do you want me to  
4 take this?

5 CHAIR MARKOWITZ: I'm sorry, what's  
6 that Dr. Cloeren?

7 MEMBER CLOEREN: Do you want me to  
8 take this?

9 CHAIR MARKOWITZ: Sure.

10 MEMBER CLOEREN: So our first  
11 recommendation is in reference to previous ones  
12 directly related to the April 5th response to  
13 the Board.

14 We request that the program  
15 facilitate a conversation between a subset of  
16 the next Board and program industrial  
17 hygienists to gain more insight into IH  
18 processes.

19 And the Board would come to an  
20 agreement on the framework for this  
21 conversation ahead of time. The framework  
22 would include follow up on the responses in

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1 between, you know, from the Department of Labor  
2 on April 5th and March 21st.

3 And then so basically the  
4 recommendation is that we meet with the  
5 Department of Industrial Hygienists to help  
6 frame a subsequent conversation that would  
7 include at least two of the contract IHs.

8 So the proposal is for collaborative  
9 conversation to map out the framework for a  
10 subsequent conversation with the contract  
11 industrial hygienist.

12 I'm not sure that we need to go  
13 through the rationale or the details right now  
14 do we Dr. Markowitz or --

15 CHAIR MARKOWITZ: No, Steve  
16 Markowitz, no we don't need to. A question for  
17 Mr. Jansen. Is this something that a  
18 recommendation that the Board has to vote on or  
19 is this, because this is in follow up of a  
20 prior recommendation. Right?

21 And does this kind of fall into the  
22 information request or is it, would it be

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1 better that we actually consider it as a  
2 recommendation?

3 MR. JANSEN: It seems it might work  
4 best as a follow-up recommendation to the  
5 response to the original recommendation if that  
6 makes sense.

7 CHAIR MARKOWITZ: Okay. Sure, sure,  
8 okay. Thanks. Okay, the floor is open for  
9 discussion.

10 MEMBER SPLETT: The only comment I  
11 have is on the first line. Instead of we  
12 request again, we recommend.

13 CHAIR MARKOWITZ: I'm wondering,  
14 Steve Markowitz, in the third line what it  
15 means the Board would come to agreement on our  
16 framework. It's the Board agreeing with  
17 itself? Is that what --

18 MEMBER CLOEREN: I'm not sure that  
19 line belongs in there. I mean, the point of  
20 the first meeting is to collaborate on  
21 developing the framework for the subsequent  
22 conversation.

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1           So I think that maybe we could say  
2 that at this meeting the, yes, I don't think  
3 that we need to come to the Board. I think it  
4 should be the subset of the Board along with  
5 the Department Industrial Hygienist would come  
6 to an agreement on the framework.

7           So I think this one doesn't make  
8 sense. It's really the framework, the first  
9 meeting is to develop a framework. The  
10 subsequent conversation that would include the  
11 contract IHs.

12           MEMBER BOWMAN:       Sorry, just to  
13 clarify, in the memo the Board received dated  
14 April 5th, 2024, the Department said that the  
15 program would facilitate a conversation between  
16 the Board and Department IH's, program IHs to  
17 seek information regarding certain aspects of  
18 the work.

19           And that the Department is willing to  
20 consider such a request if implying only if a  
21 clear framework for such assessment could be  
22 agreed upon ahead of time.

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1 My reading of that from the memo was  
2 that they wanted a framework even for the  
3 initial meeting --

4 MEMBER CLOEREN: That's a good point.

5 MEMBER BOWMAN: -- program IHs. On  
6 top of that, we would like to meet right with  
7 contract IHs which was not part of the initial  
8 statement that we got from the memo.

9 Nonetheless, we thought if after we  
10 had that conversation with the Department IHs,  
11 that perhaps we could arrange for an actual  
12 meeting with some contract IHs.

13 PARTICIPANT: Right.

14 MEMBER BOWMAN: And so I thought  
15 potentially that it is --

16 PARTICIPANT: Yes, that is --

17 MEMBER BOWMAN: -- I thought, I  
18 understood that the Department would like us to  
19 have a framework even for that conversation  
20 with the Department IHs.

21 MEMBER CLOEREN: Do we need to have  
22 that -- okay. So what would be the mechanism

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1 actually for developing a framework for the  
2 request for meeting to develop a framework for  
3 a request.

4 MEMBER BOWMAN: So I guess the Board  
5 would come to agreement with DOL on a framework  
6 for this conversation ahead of time is the  
7 implied --

8 MEMBER CLOEREN: The whole court,  
9 like us now?

10 MEMBER BOWMAN: I don't know.

11 MEMBER CLOEREN: Because the next  
12 meeting of the Board is not until November and  
13 we want this to happen before then. Right?

14 MEMBER BOWMAN: I don't know if it  
15 needs the whole Board. The May, sorry, the  
16 April 5th memo --

17 CHAIR MARKOWITZ: No, I -- Steve  
18 Markowitz. It can't be that the entire Board  
19 would need to agree on the framework.

20 MEMBER BOWMAN: Right.

21 CHAIR MARKOWITZ: Because this is  
22 really a --

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1 MEMBER BOWMAN: A subcommittee.

2 CHAIR MARKOWITZ: -- work in  
3 progress. Information exchange so --

4 MEMBER BOWMAN: Members of the Board.

5 CHAIR MARKOWITZ: Yes, the and the  
6 third line where it says the Board we could  
7 say, you know, prior to this conversation, a  
8 subset of the Board would develop and submit a  
9 framework for this conversation. Does that --

10 MEMBER BOWMAN: Yes.

11 CHAIR MARKOWITZ: -- does that get  
12 the sequence right?

13 MEMBER BOWMAN: I think so. I wrote  
14 down what you were saying.

15 CHAIR MARKOWITZ: So where the cursor  
16 prior to this conversation, a subset --

17 MEMBER BOWMAN: Subset of the Board.

18 CHAIR MARKOWITZ: -- of the Board  
19 would develop.

20 MEMBER BOWMAN: Yes.

21 CHAIR MARKOWITZ: And submit to DOL a  
22 framework for this conversation.

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1 MEMBER BOWMAN: Yes.

2 (Off-microphone comment.)

3 (Simultaneous speaking.)

4 MEMBER CLOEREN: Correct, that works.

5 CHAIR MARKOWITZ: Right. I don't  
6 think in this recommendation, you have to state  
7 the next thing that the framework would include  
8 follow up on the responses. That's --

9 MEMBER BOWMAN: Yes, I agree. I  
10 think that could be taken out, be included in  
11 the justification.

12 CHAIR MARKOWITZ: Yes.

13 MEMBER CLOEREN: Since this is a  
14 formal recommendation, is the next line a  
15 second one, a second recommendation or is it  
16 part of this?

17 CHAIR MARKOWITZ: No, I think --  
18 Steve Markowitz. You can take out what you  
19 just restored, the framework sentence, but and  
20 there, Dr. Cloeren, you're recommending that  
21 instead of saying we anticipate, we recommend  
22 that the next step is that what you --

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1           MEMBER CLOEREN:    I'm wondering if,  
2           let's do this one.    I'm wondering if we can  
3           wrap it into the sentence before and say, you  
4           know, part of this conversation is a subset  
5           would develop and submit and a framework for  
6           this conversation to include granting a  
7           subsequent meeting that includes at least two  
8           contract IHs.

9           Would that work?    I mean, that way  
10          we're kind of making clear we really want to  
11          talk with the contract IHs.   But you know, we  
12          would not with the Department.

13          CHAIR    MARKOWITZ:        Okay    other  
14          comments, suggestions on that language?

15          MEMBER CLOEREN:    That work?

16          CHAIR    MARKOWITZ:        I    would    add  
17          planning and conducting a subsequent meeting  
18          because --

19          MEMBER CLOEREN:    Okay.

20          CHAIR    MARKOWITZ:        Okay.

21          MEMBER CLOEREN:    In the line above  
22          where it says framework for this conversation,

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1       could you just put a comma after  
2       "conversation?"

3                   CHAIR MARKOWITZ:     Okay, additional  
4       comments, questions?     Okay, someone want to  
5       read this since we've changed it so much?

6                   MEMBER BOWMAN:     I can read it.

7                   CHAIR MARKOWITZ:     Great.

8                   MEMBER BOWMAN:     I've made notations  
9       here which would allow Kevin to confirm and  
10      then I can send this to the Board after.  
11      Directly related to the April 5, 2024 DOL  
12      response to ABTSWH we recommend that the  
13      program facilitate a conversation between a  
14      subset of the next Board and DEEOIC industrial  
15      hygienists, IH, to gain insight into IH  
16      processes.

17                   Prior to this conversation, a subset  
18      of the Board would develop and submit to DOL a  
19      framework for this conversation to include  
20      planning and conducting a subsequent meeting  
21      that includes at least two contract IHs.

22                   CHAIR MARKOWITZ:     Okay, a vote?

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1 MR. JANSEN: I'll record the vote.

2 Dr. Bowman?

3 MEMBER BOWMAN: Yes.

4 MR. JANSEN: Mr. Catlin?

5 MEMBER CATLIN: Yes.

6 MR. JANSEN: Dr. Cloeren?

7 MEMBER CLOEREN: Yes.

8 MR. JANSEN: Was that a yes, Dr.

9 Cloeren?

10 MEMBER CLOEREN: Yes, it was. Yes,  
11 it was a yes.

12 MR. JANSEN: Dr. Friedman-Jimenez?

13 MEMBER FRIEDMAN-JIMENEZ: Yes.

14 MR. JANSEN: Dr. Markowitz?

15 CHAIR MARKOWITZ: Yes.

16 MR. JANSEN: Dr. Mikulski?

17 MEMBER MIKULSKI: Yes.

18 MR. JANSEN: Dr. Vlahovich?

19 MEMBER VLAHOVICH: Yes.

20 MR. JANSEN: Mr. Key?

21 MEMBER KEY: Yes.

22 MR. JANSEN: Ms. Splett?

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1 MEMBER SPLETT: Yes.

2 MR. JANSEN: Ms. Whitten?

3 MEMBER WHITTEN: Yes.

4 MR. JANSEN: Mr. Domina?

5 MEMBER DOMINA: Yes.

6 MR. JANSEN: There are 11 yes votes  
7 and zero no votes.

8 CHAIR MARKOWITZ: Just for my  
9 information, how many recommendations do we,  
10 how many more recommendations do we have from  
11 IH? Just --

12 (Off-microphone comment.)

13 CHAIR MARKOWITZ: Five?

14 MEMBER BOWMAN: This is, there are  
15 five total, we've just voted on the first.

16 CHAIR MARKOWITZ: Okay, good. Okay,  
17 let's go to the next.

18 MEMBER CLOEREN: So this second one  
19 is in follow up to the March 21st, '24 response  
20 memo about agreeing with modifying the IH  
21 reports to really communicate what was found in  
22 the different sources of case disclosure data.

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1           So the request is that the program  
2 provide an update on the status and timeline of  
3 their efforts to work with the contractor to  
4 develop feasible changes that has basically  
5 reported from the response memo. This is  
6 pretty straight forward.

7           CHAIR MARKOWITZ: Steve Markowitz.  
8 Is, does this constitute an information request  
9 or do we, is it better that we consider this as  
10 a recommendation?

11           MR. JANSEN: I'm reading it. This  
12 seems more like an information request to me,  
13 Dr. Markowitz.

14           CHAIR MARKOWITZ: Yes. So that means  
15 that if it's coming from the working group that  
16 we can, you know, write it up and pass it on.  
17 I mean, are there any comments or objections  
18 from the Board?

19           Okay. Okay, so let's move on to  
20 Recommendation No. 3.

21           MEMBER CLOEREN: The third is that  
22 the Board seeks reconsideration of its previous

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1 recommendation to provide the Occupational  
2 History Questionnaire along with IH report  
3 commentary related to the content of the OHQ to  
4 any physician asked to address causation in a  
5 case along with the accompanying IH reports  
6 that would address the validity.

7 Actually, we probably don't need that  
8 parenthetical up above since we state that  
9 along with accompanying IH report that would  
10 address the validity of the information thereby  
11 mitigating the concerns noted by the, actually  
12 the program for providing OHQ expressed in the  
13 March 21st response memo.

14 I think you can remove that  
15 parenthesis because we've had pause about that  
16 later.

17 MEMBER BOWMAN: I would agree.

18 CHAIR MARKOWITZ: Steve Markowitz.  
19 Could you just very briefly, you say mitigating  
20 the concerns noted by the program. Just  
21 recount what those concerns are very briefly.

22 MEMBER BOWMAN: Yes, in the Board's

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1 memo, sorry, in the Department's memo they --  
2 I'll pull it up right here. There was concerns  
3 about providing unvalidated OHQ information to  
4 a physician would invite the physician to rely  
5 on unproven or inaccurate exposure data to  
6 inform their opinion.

7 We discussed this as a Board  
8 yesterday. This recommendation reflects that  
9 discussion.

10 CHAIR MARKOWITZ: I see. Okay.  
11 Comments, questions, recommended changes in  
12 language here?

13 Okay, so let's take a vote. Can we  
14 have one last reading out loud of the  
15 recommendation?

16 MEMBER BOWMAN: I could do that.  
17 This is what I have. The ABTSWH seeks  
18 reconsideration of its previous recommendation  
19 to provide the Occupational History  
20 Questionnaire, OHQ, to any physician asked to  
21 address causation in a case along with the  
22 accompanying IH reports that would address the

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1 validity of OHQ information thereby mitigating  
2 the concerns noted by program for providing the  
3 OHQ expressed in the March 21, 2024 response  
4 memo.

5 MEMBER CLOEREN: Could we add the  
6 word "the" before "program" in the fourth line?  
7 Thank you.

8 CHAIR MARKOWITZ: Okay. Then let's  
9 take a vote.

10 MR. JANSEN: I'll record the vote.  
11 Dr. Bowman?

12 MEMBER BOWMAN: Yes.

13 MR. JANSEN: Mr. Catlin?

14 MEMBER CATLIN: Yes.

15 MR. JANSEN: Dr. Cloeren?

16 MEMBER CLOEREN: Yes.

17 MR. JANSEN: Dr. Friedman-Jimenez?

18 MEMBER FRIEDMAN-JIMENEZ: Yes.

19 MR. JANSEN: Dr. Markowitz?

20 CHAIR MARKOWITZ: Yes.

21 MR. JANSEN: Dr. Mikulski?

22 MEMBER MIKULSKI: Yes.

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1 MR. JANSEN: Dr. Vlahovich?

2 MEMBER VLAHOVICH: Yes.

3 MR. JANSEN: Mr. Key?

4 MEMBER KEY: Yes.

5 MR. JANSEN: Ms. Splett?

6 MEMBER SPLETT: Yes.

7 MR. JANSEN: Ms. Whitten?

8 MEMBER WHITTEN: Yes.

9 MR. JANSEN: Mr. Domina?

10 MEMBER DOMINA: Yes.

11 MR. JANSEN: There are 11 yes votes  
12 and zero no votes.

13 CHAIR MARKOWITZ: Okay, next  
14 recommendation.

15 MEMBER CLOEREN: The next one is more  
16 of an information requested I think. I don't  
17 know if we need to vote on this one. What do  
18 you think?

19 CHAIR MARKOWITZ: Well let's clarify  
20 what it is first and then we'll ask that  
21 question.

22 MEMBER CLOEREN: Okay.

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1 CHAIR MARKOWITZ: So what does it  
2 mean to ask for the Board, the Advisory Board  
3 on Toxic Substances and Worker's Health  
4 requests a report detailing claims decisions  
5 accepted or denied in the last two years in  
6 cases that were sent for referee opinion. So I  
7 just want to know what the --

8 MEMBER CLOEREN: What the --

9 CHAIR MARKOWITZ: What that report  
10 might consist of.

11 MEMBER CLOEREN: I think it would be  
12 I don't know how many, a couple of hundred  
13 cases and that might have been more than, that  
14 might have been over more than two years so it  
15 might 130 cases or something along those lines.

16 Of the cases that were sent to the  
17 internal QTC referee doctor when there was a  
18 difference in opinion, there was enough of a  
19 difference of opinion between the treating  
20 doctor, or the personal doctor, and the CMC,  
21 that the claims examiner needed a tiebreaker.

22 And then they send it to the referee

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1 that's also a QTC doctor and I had some  
2 concerns that there might be bias toward other  
3 docs within your own organization because this  
4 is a different way to do referees than other  
5 OWCP approaches.

6 So I thought it was worth looking at  
7 how often the referee doctor, you know, what  
8 one way or the other. I think that the claims  
9 decision, we're making an assumption here.

10 I'm making an assumption that the  
11 claims decision was, would have been based on  
12 the referee recommendations. So if we see that  
13 near 95 percent of them are agreeing with the  
14 CMC, then it might be worth actually looking at  
15 some of those cases that were referred.

16 Because I wouldn't expect 95 percent  
17 agreement, you know, when the claims examiner  
18 was having a hard time deciding which one had  
19 the, you know, the best rationale.

20 CHAIR MARKOWITZ: Steve Markowitz.  
21 You mentioned some numbers about a number of  
22 referee cases in the last couple of years.

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1 What were those numbers?

2 MEMBER CLOEREN: There was a slide  
3 showing that yesterday and I think it was maybe  
4 a four- or five-year period. And I thought,  
5 there was just recall, but I thought it was  
6 about 200 and some went for a referee during  
7 the time period that we were looking at in the  
8 report yesterday.

9 MEMBER BOWMAN: Yes, I have it here.  
10 That table was 268 file for referee, review  
11 referee of causation.

12 MEMBER CLOEREN: And that was in what  
13 time period? I think that the years were more  
14 --

15 MEMBER BOWMAN: 2020 to 2023 it  
16 appears.

17 CHAIR MARKOWITZ: So yes, a four-year  
18 time period. So is the request here for a  
19 sample of cases? I mean, how many?

20 (Simultaneous speaking.)

21 MEMBER CLOEREN: I have to look --

22 CHAIR MARKOWITZ: I mean, it seems

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1       like a lot of work that's being, that would be  
2       involved so.

3                   MEMBER CLOEREN:    I don't think it  
4       would be.    I mean I think that, if they could  
5       produce the table showing how many cases went  
6       for referee, I imagine it's easy enough to show  
7       from those cases that went to referee what was  
8       the eventual decision accept or deny?

9                   CHAIR MARKOWITZ:    But I guess it,  
10      Steve Markowitz, it depends on what kind of  
11      detail that we want them to look at.

12                   MEMBER CLEOREN:    I'm just looking for  
13      the eventual decision.    I just, could I just  
14      get a sense of whether there's a concern for  
15      the program, you know, organizational bias.

16                   CHAIR MARKOWITZ:    Oh, I see.    So you,  
17      so the request is simply for what percentage  
18      were accepted and what percentage were denied?

19                   MEMBER CLOEREN:    After referee.  
20      Correct.

21                   CHAIR MARKOWITZ:    I see.    Okay,  
22      thanks.    Mr. Vance?

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1 MR. VANCE: And just a point of  
2 clarification for consideration by the Board,  
3 remember the referee opinions as Dr. Bowman  
4 indicated.

5 You can have referee opinions on  
6 disputes on medical diagnoses, causation,  
7 impairment and medical need for care so just  
8 keep in mind you're going to capture referees  
9 on a lot of different subjects.

10 MEMBER CLOEREN: Okay. I think --

11 MEMBER BOWMAN: Thank you. That's  
12 important.

13 MEMBER CLOEREN: -- for that  
14 clarification I think that's fine because  
15 they're all, all referees reflect a difference  
16 in opinion between the, you know, the personal  
17 doctor and the CMC that the claims examiner  
18 needed some help resolving.

19 CHAIR MARKOWITZ: But should we amend  
20 the statement though to have these broken down  
21 by the type?

22 MEMBER CLOEREN: That might be

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1 helpful.

2 (Simultaneous speaking.)

3 MEMBER BOWMAN: For the review.

4 MEMBER CLOEREN: Yes, that might be  
5 helpful to --

6 MEMBER BOWMAN: Yes.

7 MEMBER CLOEREN: -- yes, to include  
8 the reason for the --

9 MEMBER BOWMAN: So maybe after, at  
10 the end of the sentence say broken down by type  
11 of --

12 MEMBER CLOEREN: Or categorized.  
13 Categorized by type.

14 MEMBER BOWMAN: Or categorized, thank  
15 you. Yes.

16 MEMBER CLOEREN: What type of case.

17 MEMBER BOWMAN: Categorized.

18 MEMBER CLOEREN: What type of  
19 questions --

20 MEMBER BOWMAN: Categorized by type  
21 of review.

22 MEMBER CLOEREN: Yes.

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1 CHAIR MARKOWITZ: So this getting  
2 back to, Steve Markowitz, getting back to your  
3 original question, this strikes me as more of  
4 an information request than a recommendation.  
5 Does that conform with --

6 MEMBER CLOEREN: I agree. I agree.

7 MR. JANSEN: Yes, I agree. This is  
8 an information request.

9 CHAIR MARKOWITZ: Okay. So, you  
10 know, so we do need some rationale to go along  
11 with it. You know, there's a form, it's easy  
12 enough whoever ends up writing this up, but you  
13 know, you and I we can communicate about that  
14 so.

15 MEMBER CLOEREN: I can do that.

16 CHAIR MARKOWITZ: Yes. Okay, thanks.  
17 Okay, let's move on. The Advisory Board talks  
18 exceptions to the workers' health requests  
19 documentation in support of the assertion that  
20 Environmental Health and Safety programs  
21 implemented in the mid-1990s greatly reduced  
22 the potential for workers to have had

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1 significant exposures to toxic substances at  
2 DOE facilities.

3 And that any such work processes  
4 events or circumstances leading to significant  
5 exposure would likely have been identified and  
6 documented in employment records. So the floor  
7 is open for discussion.

8 MEMBER CLOEREN: I would like to  
9 include contractors somehow in this because  
10 programs that were aimed at employees may not  
11 have reached contractors and it might be worth  
12 sort of looking separately at documentation.

13 It may be captured in the idea of  
14 workers, you know, both the DOE employees and  
15 contractors. I don't know whether it's worth -  
16 -

17 MEMBER BOWMAN: We could, we could  
18 add a parenthetical after workers to say either  
19 DOE or contractors.

20 MEMBER CLOEREN: I think that would  
21 be helpful.

22 CHAIR MARKOWITZ: Steve Markowitz.

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1 Is your, Dr. Cloeren, was your concern about  
2 subcontractors? Or was it --

3 MEMBER CLOEREN: Well I guess my, my  
4 stance is with construction workers. Right?

5 CHAIR MARKOWITZ: Right.

6 MEMBER CLOEREN: And so they're for  
7 the most part contractors. Some of them are  
8 subcontractors

9 CHAIR MARKOWITZ: Right. Okay.

10 MEMBER CLOEREN: In any event, a lot  
11 of times I think safety plans that are in  
12 Government institutions and this is based on  
13 past work for federal agencies doesn't really  
14 reach to contractors on site.

15 CHAIR MARKOWITZ: Right. So we're  
16 going to assume that contractors include  
17 subcontractors.

18 MEMBER CLOEREN: I would, yes.

19 CHAIR MARKOWITZ: Yes. Okay.

20 MEMBER BOWMAN: Dr Markowitz, are you  
21 suggesting that it would be better to  
22 explicitly state subcontractors?

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1 CHAIR MARKOWITZ: No, no. I think  
2 well I mean if there's any confusion, we could  
3 include them, yes, that's good. We might as  
4 well include them. Comments, questions? Yes,  
5 Ms. Splett?

6 MEMBER SPLETT: When I'm reading the  
7 bottom that word process events or  
8 circumstances leading to exposures would be  
9 identified in employment records.

10 Not an expert here, but I've seen a  
11 lot of Hanford employment records and there's  
12 none of that stuff in the employment records.  
13 If you're using the word employment records as  
14 in an HR type record.

15 If you're talking about a health and  
16 safety record, that's totally different. But  
17 using the term employment records causes me  
18 some discomfort. Mr. Domina, I see you nodding  
19 your head. Do you agree?

20 CHAIR MARKOWITZ: Yes, so what's the  
21 broader term that we was appropriate?

22 MEMBER CLOEREN: I think facility

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1 records. Would that work?

2 MEMBER SPLETT: What was the term?

3 MEMBER CATLIN: Facility. I don't  
4 think that would work either.

5 MEMBER SPLETT: No.

6 MEMBER CATLIN: I think if we just  
7 remove that last three words and just, we're  
8 just looking to that this has been documented  
9 and we're looking for that information.

10 MEMBER SPLETT: It really was the  
11 term "employment" it was kind of like we don't,  
12 none of those things would be in an employment  
13 record at the Hanford site.

14 MEMBER CATLIN: So we don't really  
15 care where it's at. We just want to see the  
16 documentation?

17 MEMBER SPLETT: Got it.

18 MEMBER WHITTEN: This is Dianne  
19 Whitten. What exactly are you looking for  
20 because I can just see them sending you back a  
21 copy of 851, 850, saying this is our  
22 documentation that we improved safety and

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1 health by issuing this document.

2 Are you looking for sampling data?  
3 Monitoring data? Work plans that significantly  
4 changed the safety and health itself? Is that  
5 what you're looking for?

6 CHAIR MARKOWITZ: I think it's an  
7 open question for the Board.

8 MEMBER BOWMAN: I think there --  
9 (Simultaneous speaking.)

10 MEMBER CLOEREN: I think this is like  
11 evidence that there was documentation showing  
12 compliance with the policy. Right?

13 MEMBER WHITTEN: Right. I like that  
14 wording a lot better.

15 MEMBER SPLETT: I guess my question  
16 is if the Board is asking the Department of  
17 Labor to show the Department of Energy is  
18 compliant, does that make sense?

19 Or maybe it does. I don't know, Mr.  
20 Vance. Is Department of Labor monitoring  
21 Department of Energy's compliance in health and  
22 safety overall?

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1 MR. VANCE: I'm looking at Steve  
2 because I'm going to say, you know, this is a  
3 question that the Board needs to resolve.  
4 You're making a request for the Department of  
5 Labor to provide rationale in support of  
6 findings that are industrial hygienists are  
7 making in industrial hygiene reports.

8 That would be your question. But,  
9 you know, in developing a response the  
10 Department of Labor is going to go to whatever  
11 sources or information that they think is going  
12 to be best suited to answer the question which  
13 could be the Department of Energy.

14 CHAIR MARKOWITZ: Steve Markowitz.  
15 So I think in the rationale, there could be  
16 some further description of what the  
17 documentation, what documentation is of  
18 interest or what documentation is not of  
19 interest.

20 I don't think, for instance, the  
21 Board would want reams of industrial hygiene  
22 monitoring reports demonstrating that the toxic

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1 substance X was well controlled in 2002.

2 So that could be dealt with in the  
3 rationale. But it should be, there should be  
4 some attempt I think to, if possible, to  
5 delineate what kind of documentation this is  
6 about.

7 MEMBER BOWMAN: Do we need to specify  
8 whose assertion we're talking about or is this  
9 talking about DOL assertion or DOE assertion?

10 CHAIR MARKOWITZ: No, my own view,  
11 Steve Markowitz, is that no, we don't, I don't  
12 think we need to document who owns that  
13 assertion.

14 So other comments, questions,  
15 recommended word changes? Too many the's,  
16 and's or but's.

17 MEMBER WHITTEN: This is Dianne  
18 Whitten again. I understand what you're  
19 looking for because this term ends up in the IH  
20 reports all the time.

21 After the mid-'90s everything was,  
22 you know, hunky-dory out there, but you know,

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1 we know as a fact working at the Tank Farms,  
2 that we were still having people exposed up  
3 until 2017 until we, you know, called a stop  
4 work and put people in SCBAs and had a lawsuit.

5 So I just don't know how to go about  
6 asking for the right information.

7 CHAIR MARKOWITZ: So is this an  
8 information request or a recommendation?

9 MR. JANSEN: I believe this is also  
10 an information request.

11 CHAIR MARKOWITZ: Okay. Okay, yes.  
12 Meaning it doesn't require a vote.

13 MR. JANSEN: Yes.

14 CHAIR MARKOWITZ: But someone is  
15 going to complete this information request  
16 along with the rationale.

17 MR. JANSEN: Yes.

18 CHAIR MARKOWITZ: And who is that?

19 MEMBER CATLIN: Yes, I mean, we're  
20 really asking for the praise that's often in  
21 the IH report that discusses this timeframe as  
22 a shift in safety and health.

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1                   So we really want to know what is the  
2 Industrial Hygienist relying on when they make  
3 that statement in a rationale?

4                   CHAIR MARKOWITZ: Right.

5                   MEMBER CATLIN: So we don't really  
6 need to, we don't really need probably all the  
7 detail here about it. We need, we want to  
8 understand the rationale for that statement.

9                   Are they referring to some, you know,  
10 Departmental summary that was provided or just  
11 something else or are they simply referring to  
12 the fact that, you know, there was a change in  
13 policy at that point?

14                   And we're assuming that everything  
15 happens so.

16                   CHAIR MARKOWITZ: All right. Or  
17 there, you know, at some point, the Idaho  
18 National Lab could have had an evaluation.  
19 Right? Of their health and safety program and  
20 their record, their performance and what, you  
21 know, the actual conditions of their health and  
22 safety in 2010.

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1           If that exists and as part of the  
2 thinking and finally that would be nice to look  
3 at. Okay.

4           MEMBER BOWMAN:     In terms of who  
5 writes it, I think the IH subcommittee makes  
6 sense. I think it would be really helpful to  
7 have the initial come from someone who isn't  
8 IH.

9           So I would nominate Mark if he was so  
10 willing. And I'd be happy to take a look.  
11 But, you know, --

12          MEMBER CATLIN:     Yes, certainly  
13 willing to do that and it might be this might  
14 be as an information request maybe it follows  
15 up after we have the conversation about the  
16 industrial hygiene staff.

17          So that might, it might be more clear  
18 after that conversation what this should look  
19 like.

20          MEMBER BOWMAN:     Absolutely.

21          CHAIR MARKOWITZ:   Mr. Vance?

22          MR. VANCE:         And, Mark, if you're

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1 going to be one of the folks leading that  
2 effort, what I would encourage you to also do  
3 is revisit our prior Board meetings where we  
4 had discussions about this topic.

5 Because there's been a lot of  
6 interaction between the Board and  
7 recommendations that have been made by the  
8 Board that the Department had accepted  
9 regarding this entire discussion.

10 So there is a history of this  
11 discussion in prior Board meeting notes and  
12 transcripts and all that sort of thing.

13 MEMBER CATLIN: That would have been  
14 prior to 2020?

15 MR. VANCE: Yes, I'm not sure exactly  
16 when, but I do know that there was  
17 recommendations about this issue and I know  
18 that there was a lot of dialogue going back and  
19 forth between the Department and the Board in  
20 the past so just for information sake.

21 MEMBER CATLIN: Thank you.

22 MEMBER MARKOWITZ: Mr. Domina?

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1                   MEMBER DOMINA:     Just to clarify I  
2     guess a little bit with what Mr. Vance said too  
3     because before that 1995, they were saying  
4     1980s because they were trying to late 1980s  
5     use the Tiger Team Reports.

6                   And we show that year after year when  
7     they came out to visit the site, nothing was  
8     done to validate that so it moved to '90s and  
9     then they used 851 which came out in '95 which  
10    doesn't arbitrarily get implemented on that day  
11    and date.

12                  And one of the issues that we had at  
13    Hanford, we had contract changes going on then  
14    so the one leaving isn't going to implement  
15    anything and the one coming in, excuse me,  
16    takes a couple of years to come up to speed.

17                  And they also look back at the SEC  
18    for Savannah River which also shows that they  
19    were fined in the late '90s by DOE for not  
20    implementing certain safety requirements and  
21    stuff so I mean there's a lot of history there.

22                  CHAIR MARKOWITZ:     Okay.     I think

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1 we're done on that. Is that right? Okay, so  
2 we have --

3 PARTICIPANT: About 25 minutes or so.

4 CHAIR MARKOWITZ: I'm sorry, 25  
5 minutes or so left. I think we need to, you  
6 know, plan the future work over the next couple  
7 of months and transition to a new Board term.

8 We have three working groups by way  
9 of structure and I think we don't need to do  
10 this right now, but I think we need to do this  
11 soon is re-identify who's in what working  
12 group. So that there's some clarity there.

13 Those three groups are the SEM  
14 working group, the IH -- and we're going to  
15 combine for the moment a CMC with the IH  
16 working group so that CMC issues can be not  
17 forgotten about or at least part there even if  
18 there's nothing pending.

19 And then we're going to have a, for  
20 the lack of a better term, a science working  
21 group although we could entertain new titles  
22 for that working group, but that's where the

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1 hearing loss analysis would come out of.

2 That's where any future reviews of  
3 IARC 2A carcinogens would be handled. And then  
4 follow up on the Parkinson's disease/disorders  
5 discussion.

6 So are there any other working groups  
7 that we've had that we need to just include in  
8 the structure? I don't think so at the moment.

9 Okay. You know, we're going to  
10 submit these information requests and  
11 recommendations, some of this information, some  
12 of the decision by the Department of Labor may  
13 be available during this Board term and will,  
14 you know, just continue that work during this  
15 term as we receive them.

16 I would, I want to propose an idea  
17 for the beginning of the next term, next Board  
18 term, which is that the Board request, consider  
19 requesting a number of claims to review.

20 I think that, I can't remember, has  
21 this Board term the last two years, have we  
22 reviewed claims?

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1           Yes.    So it's extremely useful to  
2 review claims, a limited number because it  
3 really acquaints us with the process. We just  
4 relearn what the process is.

5           You know, one of those public  
6 comments focused on the performance of I think  
7 claims examiners, the performance of the  
8 industrial hygienists, there were various  
9 observations made.

10           And, you know, frankly, it's hard for  
11 us to kind of understand those observations  
12 unless we at least look at a limited number of  
13 claims and see what those observations might be  
14 about.

15           So I would propose that we request a  
16 limited number because it's laborious  
17 preferably at next, but you know, whatever.  
18 Claims, it takes a while to prepare those  
19 claims for our department.

20           And that they be ready for the new  
21 Board when the new Board becomes official. We  
22 should, first let me open the floor to that

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1 idea, but then I don't know whether you have  
2 time today to discuss what kind of claims we  
3 want to look at because we either, a lot of  
4 possible claims, but Mr. Domina?

5 MEMBER DOMINA: I guess I'd ask for  
6 Mr. Vance. And the reason behind on what type  
7 of claims because talking to the folks here at  
8 Oak Ridge on what they're seeing going forward  
9 is kind of the same thing we see at Hanford.

10 I was and over the last two meetings  
11 that Mr. Vance has commented on the claim  
12 number going up I was just wondering if you  
13 knew what type of claims they were.

14 And then if so, pursue that as asking  
15 for those type of claims because we see some in  
16 a couple of different categories as the uptick  
17 in the claimant population.

18 MR. VANCE: Yes, this is John. What  
19 I would say is your, the sky is the limit when  
20 it comes to what the Board might want to ask  
21 about.

22 We do know that we have seen an

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1 uptick in the number of consequential illness  
2 claims being associated with previously  
3 accepted cases.

4 We continue to see a pretty strong  
5 amount of cases coming from the south, you  
6 know, southwest involving pulmonary disease.  
7 We're seeing an increased clip of what I would  
8 characterize as novel arguments involving  
9 generally not non-occupational illnesses,  
10 conditions like diabetes, arthritis,  
11 degenerative disc disease, spinal stenosis,  
12 Alzheimer's disease that are being associated  
13 with other types of things.

14 So I mean, really it's a matter of  
15 specificity and what it is that you're looking  
16 for. Are you looking for cases that are  
17 limited to treating physician opinions that are  
18 driving an approval or cases that are denied  
19 based on a CMC referee assessment or other  
20 types of characteristics?

21 So I mean it really is a matter of  
22 the Board agreeing to what it is that they

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1 might be interested in seeing and being very  
2 specific in the request about what it is that  
3 you want to look at.

4 I know that the Board has looked at,  
5 if I recall correctly, a lot of pulmonary  
6 disease claims. I think that we've facilitated  
7 those types of claims in the past.

8 So I just want to be thinking about  
9 other types of categorizations of disease that  
10 might be out there. It really is a matter of  
11 just what does the Board agree that they want  
12 to look at really more than anything else.

13 MEMBER BOWMAN: In terms of types of  
14 cases, I thought it was --

15 CHAIR MARKOWITZ: This is Dr. Bowman  
16 speaking.

17 MEMBER BOWMAN: Sorry, this is Dr.  
18 Bowman. I thought cases that are now utilizing  
19 the new IH template would be helpful to include  
20 and then the conversation with the IHs and when  
21 we hear back on the information request about  
22 the updates on the communication, but that

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1 would take some time. I think the new template  
2 has been in force for, what maybe nine months  
3 or something now?

4 CHAIR MARKOWITZ: Steve Markowitz. I  
5 think it would be most profitable to see cases  
6 that included IH and CMC reports, although  
7 there could be some cases that just have IH  
8 reports without the CMC, but one or both would  
9 be most interesting.

10 I think denials, cases that are  
11 denied kind of are of most interest to us. I'm  
12 not all that keen about impairment cases I have  
13 to say. It's a very specialized -- Dr.  
14 Cloeren, you're agreeing?

15 MEMBER CLOEREN: Yeah, and I think  
16 there's sort of standard protocol that you  
17 follow for impairment ratings and I think a lot  
18 of time difference of opinion is just based on  
19 how you do the exam. I don't really get much  
20 out of that.

21 CHAIR MARKOWITZ: Yeah.

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1                   MEMBER CLOEREN:     I was wondering  
2                   though, what do you think about looking at  
3                   hearing loss denials, where they fell outside  
4                   the really strict statute?     Would that be  
5                   worthwhile to see what sort of claims people  
6                   are, you know, what kind of exposure claims  
7                   people are presenting when they submit claims  
8                   for hearing loss?

9                   CHAIR MARKOWITZ:    I'm sorry, I was  
10                  writing something.    Were you asking a question  
11                  or making a comment?

12                  MEMBER CLOEREN:    I was changing the  
13                  topic --

14                  (Laughter.)

15                  MEMBER CLOEREN:    -- to a suggestion.  
16                  I don't know if it would make sense to look at  
17                  denied claims for hearing loss to see what the  
18                  exposure circumstances are that are being  
19                  described.     Right now, the criteria for  
20                  accepting it are very, very narrow and very  
21                  strict.     Would it be worthwhile to see a range  
22                  of cases where people are making claims for

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1 hearing loss and what they're reporting for  
2 exposure.

3 CHAIR MARKOWITZ: So, we're not so  
4 interested in impairment cases. The diagnosis  
5 clarification CMC reports, I think, are  
6 probably of less interest to the Board. How  
7 about consequential condition cases? It  
8 involves a ton of different -- I mean  
9 presumably the underlying condition has already  
10 been accepted and so the question is, are the  
11 new symptoms or condition, do they relate to  
12 the prior accepted condition? Do we want to  
13 look at those cases? There's a silent negative  
14 on the left.

15 (Laughter.)

16 CHAIR MARKOWITZ: Dr. Bowman?

17 MEMBER BOWMAN: I think the last time  
18 we had a set of cases to review, I think there  
19 were some of those in there and I don't think -  
20 - I'm not sure that anything came out from  
21 that, anything informative that changed the  
22 direction of the Board.

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1 I would, since we're getting data,  
2 very simple data, on the review referees, maybe  
3 some cases that are the review referee on  
4 causation --

5 MEMBER CLOEREN: That's a good idea.

6 MEMBER BOWMAN: Could be helpful.  
7 There's 268 from the prior four years. There  
8 might be some going forward if they could also  
9 be the ones using the new IH template that  
10 could sort of be two birds, one stone  
11 situation.

12 CHAIR MARKOWITZ: Steve Markowitz.  
13 I'll write up some of these things and send it  
14 around to the Board and people can weigh in,  
15 try to narrow it down as much as possible. We  
16 would need, we're talking relatively recent  
17 cases for which there have been decisions,  
18 denied cases. Causation including referee  
19 causation cases. Ones have used the new IH  
20 template which is synonymous with recent cases  
21 and including hearing loss, so far. Any other  
22 aspect of interest to people? How many cases

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1 do you want to look at? How many claims do you  
2 want to look at, board members, individually,  
3 because that helps. We usually have claims  
4 looked at by two people in our discussion.  
5 While you're thinking about that, let me ask,  
6 Mr. Vance, is it possible these days to receive  
7 claims in which there's some sort of index in  
8 which we can find the FAB report, it's on page  
9 76 or something comparable to that?

10 MR. VANCE: Yeah, unfortunately, the  
11 way that we have processed those in the past  
12 would be the way that we would process them in  
13 the future, so there's no indexing for the  
14 material. The way we have to go through the  
15 process is basically I have administrative  
16 staff who will go into the electronic imaging  
17 system and download the material. It'll come  
18 out in whatever order it's presented in that  
19 system and it does not reflect any kind of  
20 indexing. As part of the specificity of your  
21 request, you would want to be thinking about  
22 more recent cases or cases that don't have a

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1 20-year history or whatever. I mean the more  
2 specificity and flags or identifiers that you  
3 want us to apply, those are all things that  
4 you'll need to consider.

5 CHAIR MARKOWITZ: Dr. Friedman-  
6 Jimenez.

7 MEMBER FRIEDMAN-JIMENEZ: Yeah, I've  
8 reviewed a number of claims that have been over  
9 1,000 pages and most of those pages are typed.  
10 Some of them are handwritten, but most of them  
11 are typed. I've made this proposal before and  
12 I'll make it again, could the typed pages be  
13 run through an optical character recognition  
14 program, so that it makes into a character-  
15 based text that can then be searched so that  
16 the reviewer can search for specific terms and  
17 find what they're looking for instead of having  
18 to browse through 100 or 200 pages to find  
19 something. It's very time consuming, not only  
20 for us, but for the CMCs and everyone else.

21 I think that would work and it was  
22 never clear to me why exactly there's a

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1 resistance to using optical character  
2 recognition for these medical records.

3 CHAIR MARKOWITZ: Any other comments  
4 on claims review? Okay. You'll be hearing  
5 from me soon with a draft of what we would  
6 request. I'm sorry, I actually never got an  
7 answer to how many claims you want to look at.  
8 There's one proposal, anonymous proposal, for  
9 five claims. That's per person, per board  
10 member? There some anonymous quiet discussion  
11 going on among the Board. Dr. Cloeren.

12 MEMBER CLOEREN: I think that's a  
13 reasonable number.

14 CHAIR MARKOWITZ: Whatever we did  
15 last time, yeah.

16 MEMBER CATLIN: I second that.

17 CHAIR MARKOWITZ: What's that? You  
18 second that?

19 (Laughter.)

20 CHAIR MARKOWITZ: Okay. I probably  
21 have that somewhere.

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1                   MEMBER CATLIN: You've destroyed the  
2 CDs, so you'll have to look at the --

3                   (Simultaneous speaking.)

4                   CHAIR MARKOWITZ: No, no, but I have  
5 a tracking system for assigning the cases.  
6 Thinking through the time table, the next board  
7 meeting would be in the fall, usually late  
8 October/early November, so those claims would  
9 be needed by early September. If we get the  
10 request in soon, does that seem reasonable, Ms.  
11 Rhoads, Mr. Vance? Okay. Great, thank you.

12                   We're approaching the end of the  
13 meeting. Any other issues that we haven't  
14 picked up on? Ms. Splett.

15                   MEMBER SPLETT: Just a quick one, I  
16 think it would be beneficial for the next board  
17 meeting, depending on where it is, if the DOE  
18 folks who are preparing that tour understand  
19 more that this is a Part E board and not a Part  
20 B board, and find out the number of claims  
21 under Part E and what facilities and what kind  
22 of illnesses. It doesn't have to be absolutely

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1 accurate, but we know that X, Y, Z Building is  
2 where the majority of the Part E claims are  
3 coming from. Maybe even, I think it would have  
4 been useful before this meeting, before the  
5 tour, some explanation of the Oak Ridge  
6 structure, which was something I didn't  
7 understand at all, how each one were stand  
8 alone facilities from the Department of Energy.  
9 I just think make the tour a little bit more  
10 meaningful.

11 CHAIR MARKOWITZ: Yeah, so if we  
12 could put that on the to-do list. Just by way  
13 of history, Greg Lewis usually arranges these  
14 tours or he requests them and then he loses  
15 control over what the site actually provides.  
16 I think he probably communicates what the  
17 Board's about and then the site does whatever  
18 the site is going to do, but I think we can  
19 remind and emphasize this.

20 MEMBER SPLETT: I was asked to put  
21 the tour for this Board for Hanford and I did  
22 so without any knowledge of what you all were

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1 looking for, we just showed you all the really  
2 cool stuff.

3 CHAIR MARKOWITZ: Yeah, well that was  
4 a great tour. So, thank you.

5 MEMBER SPLETT: Thank you.

6 CHAIR MARKOWITZ: Okay, no other  
7 comments. Let me reiterate thank yous to Kevin  
8 and his crew for supporting this meeting; Mr.  
9 Vance, Mr. Novack for appearing and being on  
10 the hot seat to give us answers and to clarify  
11 certain things; Ms. Jerison, for hanging in  
12 there as our faithful public; Dr. Cloeren, for  
13 attending remotely; and, also I want to thank  
14 the Board members for this work over the last  
15 couple of years and for some board members  
16 before that.

17 This is an excellent program,  
18 EEOICPA, the program related to EEOICPA, and it  
19 helps a lot of people in many, many ways. It's  
20 the most comprehensive worker compensation  
21 program that exists in the US. Any set of  
22 workers across an industry and our mission and

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1       our goal in the Advisory Board is to help  
2       improve that system. We've provided advise,  
3       which hopefully targets that, whether our  
4       recommendations are always accepted or not, we  
5       do our best to improve that system. I want to  
6       express my gratitude in working with the Board  
7       members over the last couple of years. Thank  
8       you. I think I can close the meeting.

9                   MEMBER CATLIN: Steven?

10                   CHAIR MARKOWITZ: Yes.

11                   MEMBER CATLIN: I think on behalf of  
12       our Board, I think we want to thank you for  
13       your work as Chair in the past two years and  
14       before that, so I think you've done just an  
15       excellent job and thank you.

16                   CHAIR MARKOWITZ: Thanks. I think  
17       we're done.

18                   (Whereupon, the above-entitled matter  
19       went off the record at 11:22 a.m.)

20

21

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