The Advisory Board met at the Holiday Inn and Suites Idaho Falls, Snake River Room, 3005 South Fork Boulevard, Idaho Falls, Idaho, at 9:00 a.m., Steven Markowitz, Chair, presiding.

MEMBERS:

SCIENTIFIC COMMUNITY

AARON BOWMAN
MARK CATLIN*
GEORGE FRIEDMAN-JIMENEZ*
MIKE VAN DYKE

MEDICAL COMMUNITY

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

CLAIMANT COMMUNITY

JIM KEY
GAIL SPLETT
DIANNE WHITTEN

DESIGNATED FEDERAL OFFICIAL

RYAN JANSEN

*Present via video-teleconference
Welcome/Introductions:

Mr. Jansen called the meeting to order at 9:01 a.m. and welcomed the attendees. He reviewed the logistics for the meeting and the public comment period and instructed attendees how to find meeting-related information on the Board's website. There is currently one vacant position on the Board and the Department of Labor (DOL) has invited interested parties within the Claimant Community to submit nominations by May 27, 2023. He introduced the Board Chair, Dr. Steven Markowitz, who called for introductions from Board members and other attendees.

Chair Markowitz welcomed Advisory Board members, federal staff, and members of the public to the meeting.

Review of Agenda:

Chair Markowitz provided a brief overview of the Board's agenda for this two-day meeting. The agenda included briefings from federal staff on activities at the program level, working group-led discussions on the term "significance" in the context of Department of Energy (DOE) exposures and the Site Exposure Matrices (SEM), Board discussion on hearing loss and dementia, Board discussion of the quality of Industrial Hygienist (IH) and Contract Medical Consultant (CMC) reports, case reviews, and a public comment period.

DOE Office of Health and Safety Director's Welcome:

Kevin Dressman, Director of DOE's Office of Health and Safety, thanked the Board for the opportunity to share some remarks with the Board. DOE's Office of Health and Safety administers the Department's Former Worker Program and fulfills DOE's statutory obligations under the Energy Employee Occupational Illness Compensation Program Act (EEOICPA). Mr. Dressman reviewed some of his background at DOE, which has given him a strong familiarity with the health and safety challenges that current and former workers face as part of their jobs. DOE acknowledges the partnership it has with DOL and the Office of Workers' Compensation Programs (OWCP) in this program and the agreements with all DOE sites to ensure that records are provided as expeditiously as possible. DOE is always looking for ways to improve this process and he invited Board members to share their ideas with him at any time.
Office of Workers' Compensation Programs Director's Welcome:

Christopher Godfrey, Director of the DOL Office of Workers' Compensation Programs, thanked the Board and organizers for inviting him to speak and for the informative site visit to Idaho National Laboratory (INL) on the previous day. OWCP has made claimant experience an important part of its work and it hopes to take the Board's recommendations back to the program and make significant improvements. Mr. Godfrey thanked DOE for its continued cooperation, working together to ensure they can make positive improvements for the people that have been impacted through their work at DOE.

Program and Policy Update:

John Vance, DEEOIC Policy Chief, provided an update on the program's recent activities. During the period from January through March 2023, the program received 2,902 claims; made 1,252 NIOSH referrals for dose reconstruction; submitted 1,727 requests for employment data to DOE; conducted 1,207 industrial hygiene reviews; issued 5,976 final decisions; and disbursed 2,336 lump sum payments. Mr. Vance highlighted the work of the staff in expediting a decision and facilitating payment to a terminally ill individual who had entered palliative care. Staff across the country worked to make the Part B decision and process the payment, as well as a separate decision sequence to get an impairment award, all in one day.

The program conducts a recurring public webinar series and recently hosted presentations on Authorized Representatives' services and the expectations of those providing client services for claimants, an exposure and causation presumptive standard discussion, an update on changes occurring with the medical pharmacy benefits program, and held a webinar on the tools and resources available to claimants to help navigate their claims through the process. The program also participated in three interagency joint outreach events in different parts of the country.

DEEOIC has been working to develop their medical benefit adjudication resources in the Energy Compensation System and has made several changes in how medical benefit claims are managed and tracked, including eliminating the file size limitation and integrating digital submissions for various forms. The program has seen an uptick in the use of the digital submission option
for the payment processing form that was added last year.

With the end of COVID-19 public health emergency on May 11, DEEOIC has eliminated a process that allowed for telemedicine examination and now requires face-to-face appointments with physicians for individuals seeking medical benefits. The program issued a circular to provide an update on their efforts to ensure there is a process for notifying the public about any kinds of prescription medications that the program has determined have no medical efficacy. DEEOIC incorporated changes to the language on industrial hygiene reporting on exposure levels and made changes to their standards for evaluating silicosis claims under Part B concerning when tunnel mining activities at the Nevada Test Site ceased. This process led to the program going back and reevaluating any cases impacted by this change.

DOL's contractor, Paragon Technical Services, has received over 28 email SEM inquiries and 8 public internet-accessible inquiries, in addition to making major site profile updates in the SEM for several facilities. A freeze of the internal SEM for the purpose of ensuring there are no classification issues took place in May and DOE is preparing to publish the findings. At the end of April 2023, the SEM library contained over 27,000 documents related to the information communicated out in the SEM, including non-public records not stored electronically. An update has been released regarding how information is reported out on silicosis, which will reduce the likelihood of an inappropriate search outcome by staff and allow for the public to better understand silicosis and its aliases. DEEOIC is moving to a Prescription Benefit Manager for handling the processing of prescription medications, which should improve efficiencies to ensure people are getting timely authorizations for prescription medications.

Chair Markowitz noted that the program received a lot of claims for the first quarter and made a lot of referrals to IHs for exposure analyses. He asked how many of the claims were for radiation only. Mr. Vance said he could see about getting this specific information to the Board, but the 1,252 NIOSH referrals would be radiation-specific cancer claims. Chair Markowitz pointed out that the issue of eligibility for silicosis claims stemming from post-1992 exposure at the Nevada Test Site was raised by a public commenter before the Board. Mr. Vance said the comment was what prompted a harder look at the issue.

Chair Markowitz asked what DOL's current thinking is on
developing a system through which claims that were previously

denied could be reconsidered as more information comes to light

about exposures at various sites and more links are added to the

SEM. Mr. Vance summarized DOL's written response to this

question by saying that that kind of comparative analysis would

require information to be captured during case adjudication that

would allow DEEOIC to identify these types of circumstances. The

relevant rationale information is not available in the way DOL

manages the case adjudication process. It is a difficult

challenge and DOL does not have a process in place to allow for

that type of robust evaluation.

"Significance" of DOE Exposure:

Marianne Cloeren, Working Group on Significance, presented the

working group's findings on use of the term "significance" in

EEOICPA. The Act states that significant means "it is at least

as likely as not that exposure to a toxic substance at a DOE

facility was a factor in aggravating, contributing to, or

causing the death" of an employee. In the most recent Procedure

Manual, the term appears 99 times but is used in two different

technical contexts: one related to the assessment of exposure

and the other to the determination of causation. The use of the

term can be misinterpreted based on one's role and perspective.

Dr. Cloeren cited three relevant definitions for "significant"

from Merriam-Webster's Dictionary including: (1) "Of a

noticeably or measurably large amount," which correlates with

the industrial hygiene definition used for exposures; (2)

"Having or likely to have influence or effect," which relates to

causation determinations; and (3) "Probably caused by something

other than mere chance," which goes along with the EEOICPA
definition.

Current procedural guidance tells the IHs to review various

factors related to exposure and then characterize the exposure

as Significant High, Significant Moderate, Significant Low,

Between Incidental and Significant, Incidental, or No Exposure

in their exposure determination. The complexity of

characterizing exposure, however, needs to account for many

factors, such as type, route, intensity, frequency, duration,

and calendar timing of exposure related to disease onset, as

well as mitigating factors. These details may be important to

causation determination and may be obscured when applying the

current categories of exposure. The working group proposed the

following recommendations to address this: (1) IH exposure

assessments refer to the basic metrics of exposure science

(intensity, route, frequency, duration), as these details can
have distinct value in determining causation; (2) These metrics may further be divided by the facility and job under which they occurred for a claimant as relevant; (3) DOL should define what is meant by the six different categories of exposure significance in the context of these four basic metrics of exposure; and (4) DOL should clarify how a single metric of exposure can be applied when a claimant has more than one medical condition for which different basic metrics have varying importance. Dr. Cloeren presented an example of a potential new version of an IH Exposure Assessment Form and how it could be used to help the next reader of the information better understand the exposure. The proposed template would allow the exposure to be characterized with as much precision as the data permits. It would also be helpful if the IH included where in the claim file they found the information. Dr. Cloeren presented a hypothetical case as an example of the new form's utility.

Aaron Bowman emphasized the potential importance that individual metrics can have if they are contributing to a disease that is related to these metrics. Applying an overall significance that does not parse these out could lead to inaccuracy in the decisions of the medical professionals. He also clarified that the working group was not suggesting that the term "significance" should not be used.

Chair Markowitz asked about a hypothetical claimant applying for two distinct pulmonary conditions, such as COPD and asbestosis. The interpretation of the facts depends on what condition is being examined in terms of the claim. This is one problematic aspect of translating these facts into a significance description.

Gail Splett asked who would fill out this form and if the claimant would be consulted on any of it. Dr. Bowman assumed they would be completed by the IH. Dr. Cloeren said that the basic information would come from the Statement of Accepted Facts the Claims Examiner (CE) provides, while the IH would fill in the rest. Chair Markowitz commented that the IH has to take an independent look at the claimant's Occupational History Report and the Occupational History Questionnaire (OHQ), without relying entirely on the CE's interpretation or distillation of the exposure. Jim Key agreed and added that CEs typically have no historical knowledge of these jobs or sites. An interview process with the claimant needs to be incorporated because, at many sites, documentation and personal monitoring were not performed until the mid-'90s to early 2000s.
Mike Van Dyke said that the proposed form is how the IH is already thinking about this, so it would not be a major change to how they are doing things. It would be helpful in conveying information from the IH to the occupational medicine physician.

George Friedman-Jimenez said they may want to distinguish the different fields in the table by who should fill them out. The Board also needs to discuss whether a separate exposure assessment needs to be done for each medical condition, which he felt would be necessary.

Dr. Cloeren said she believed there is flexibility in the Procedure Manual for the IH to identify additional exposures that were not included in the CE's Statement of Accepted Facts. If this is not the case, it is something that should be permitted. Mr. Vance said that, generally speaking, the IHs are going to be responding to questions about individual exposures identified by the CE. If an IH identifies a glaring error that needs to be addressed there is a process for doing that.

Dianne Whitten said she liked the proposal because, if the claimant is denied, they can review this assessment to see if it is accurate for the work they performed.

Chair Markowitz said he would be surprised if the IH did not review the OHQ and EE-3, but it would be nice if they included what documentation they referred to in their report. Dr. Van Dyke said IHs will look at these for nature, extent, and duration, but did not think they would add exposures that they were not asked to classify.

Dr. Friedman-Jimenez asked about the process for determining which exposures to focus on. Mr. Vance said the Procedure Manual lays out a process by which the CE evaluates the available information, then looks at what they can tell about the employee and the claimed condition, including what information the SEM has about exposures linked to the job title. All of this information gets fed into the exposure profile worksheet the CE constructs to frame what they want the IH to consider. For unique conditions that are not listed in the SEM, the CE will turn to other resources.

Chair Markowitz asked what Board members thought about moving to the next step of sorting into levels of significance. Dr. Bowman
said there is value if these terminologies are mapped onto the context of the key metrics of exposure science that have been identified. He had no objection to the use of the term "significant" if it is broken down by these key metrics, but the value disappears when it is all collapsed into a single assessment. Mr. Key asked how the metrics are captured. If the claimant is not provided the opportunity to be interviewed and to provide this information, then the CE and IH will miss the actual exposure. Dr. Friedman-Jimenez expressed concern about using the terms "significant" and "incidental," since they depend on the disease under consideration and carry some implication of causation.

Chair Markowitz expressed some questioning about the way the Procedure Manual currently reads and asked if there was a proposal for a modified significance assessment that Board members felt ought to be examined. Dr. Friedman-Jimenez said the Board should consider setting up presumptions for the most obvious cases and rely on case-by-case evaluations of exposure and causation for the ones that do not meet the presumptions of the most obvious causal relationships. Chair Markowitz said they have been developing presumptions that DOL has found useful and the Board should continue to do that, but that they are trying to help improve the non-presumptive decision stream.

Mr. Vance said DOL has struggled with comments from the Board about the question of significance and how to characterize exposure. Distinguishing "significant" from "not significant" will remain a challenge. Dr. Friedman-Jimenez said the presumptions he was referring to are the ones that require an objectively defined level of exposure that does not use the word "significant." Most presumptions could be stated in an objective way and it is important to ensure those cases are dealt with appropriately; this table could be a great tool for people judging causation. Dr. Bowman asked if the presumptions, as currently set, are based on the IH reporting the exposure level as being significant. Mr. Vance offered a hypothetical scenario to provide clarification on the process. They are trying to get to the point where the CE has guidance that says for a presumption to be triggered there needs to be a finding of significant exposure.

Dr. Cloeren said she would be interested to hear from the IH contractor on what their instructions are to the IHs about how to make the determination of significance categories.

Dr. Van Dyke said "significant" is meaningless in this context
for the CMC, so they need this kind of advice to make decisions.

Kevin Vlahovich asked if there is consideration of aggravating or mitigating factors, or if that is only done at the CMC level. Mr. Vance said that the conditions the physician can consider in rendering a causation opinion can include aggravating or contributing effects. The challenge is that different physicians can look at the same material and reach differing conclusions. Regardless of how the terms are defined, it is ultimately up to the physician's interpretation and understanding of the case to reach an opinion on contribution, aggravation, or cause.

Since there was not general agreement regarding changes to how the program addresses the issue of significance by the IH, Chair Markowitz suggested considering a recommendation that looks at the Exposure Assessment Form and to postpone further discussion of the IH's use of the information to determine significance. Dr. Bowman agreed with this proposal and said that the intent of the working group was to have better data to inform the medical evaluation and did not consider doing anything with presumptions.

After minor edits, Dr. Bowman proposed that the Board recommend that exposure assessments made by IHs be enhanced to specifically refer to the basic metrics of exposure science: (1) exposure intensity; (2) exposure route; (3) exposure frequency; and (4) exposure duration. These elements can have distinct value in determining causation. These metrics may further be divided by the facility and job under which they occurred for a claimant as relevant. The Board recommended that DOL adopt an IH Exposure Assessment Form that puts the work of the IH in the context of these four basic metrics of exposure. The toxics to be included on the form would be those determined relevant to the claimed medical conditions. An example form was provided along with the recommendation.

Dr. Bowman made a motion to accept the recommendation. Dr. Cloeren seconded the motion, and it was unanimously approved.

**Site Exposure Matrices:**

Dianne Whitten and Gail Splett, SEM Working Group, presented on the issue of missing information in the SEM. The working group subcommittee posed several questions to Paragon and reviewed their subsequent responses. Additional questions the group sought answers for included how it is determined that a site has met their closure data and why it should be different from their
operational chemical listing. Ms. Whitten presented examples of incomplete listings in the SEM and listings that currently include only a small number of chemicals, but had hundreds of listed chemicals a few years ago. The group wanted to know why they were no longer included and who made the decision to delete them. Ms. Splett pointed to the SEM entry for Hanford's Plutonium Finishing Plant, which is a significant facility that had a major incident about five years ago, but is not included in the SEM. She added that the description of the plant as an active facility is incorrect. She asked whose responsibility it is to keep Paragon and DOL apprised of changes at the facility and ensuring the SEM information is complete and accurate. It seems to be a generic and consistent problem. The group has discussed having an assessment team go in and look at the issue, which they understand would be a large undertaking. She asked if there is an overall plan for data capture for every facility.

Mr. Vance said DOL and Paragon do planning for data capture and collection of information. The database is constantly being updated as new information is received. For specific questions as to why something is included or why it was changed in the SEM, DOL would have to discuss it with Paragon to get a better understanding of what occurred. Generally, they should be able to explain the rationale behind the changes to the SEM.

Chair Markowitz asked if information that has been removed from the SEM would still be accessible to the CE. Mr. Vance did not believe it would be, because the SEM represents the best understanding of the toxins associated with whatever the relational parameter is.

Ms. Splett asked if the Paragon contractors specialize in specific facilities or location. Mr. Vance said that DOL provided much of this information in the questionnaire. Paragon will try to assign their researchers based on specific knowledge they have about a particular site. The internal assignment of the researchers is up to the Paragon management and DOL would have to reach out to them for those questions.

Mr. Key asked how DOL or Paragon could explain or justify the removal of a labor category from a facility in the SEM. Mr. Vance said it would generally be reliant on material that has been received and assessed by Paragon in clarifying that there needs to be a change in how the information is reported. The SEM is a broad-based exposure database. It does not maintain good temporal data, but provides information about the closure versus the production periods.
Ms. Splett asked if it is within the Board's purview to request an independent assessment of a site or an area of a site and to conduct an in-depth analysis. Based on the findings of such an assessment, the Board could make much more detailed recommendations to DOL. Chair Markowitz said that providing advice to DOL on issues relating to the SEM is within the Board's charter.

Dr. Bowman asked about the underlying philosophy behind approving removal of data from the SEM. Mr. Vance said that once they have established that there was a toxic substance associated with a labor category at a site, it would be removed only if they receive information that would suggest that the labor category did not actually use this material or if it was in error when it was initially reported. If it can be established clearly that a toxic substance was associated with a labor category or work process, then it will remain in the system.

Ms. Whitten said that, according to the SEM standard operating procedures, "Changes to the chemical profiles, per the procedure, can only be performed by the SEM Chemical Profile Manager." She asked if they could request from the SEM Chemical Profile Manager all previous versions of the SEM for Hanford.

Chair Markowitz made a motion that the Board request for Paragon staff to appear before the ABTSWH for the purpose of clarifying aspects of the SEM. Dr. Cloeren seconded the motion and it passed unanimously.

Ms. Whitten presented an additional example from Hanford, 105 K East, in which an operating reactor currently has five chemicals listed but had a couple hundred of toxic substances listed years ago, as well as many more labor categories and work processes. Chair Markowitz thought this would be a useful example to cite to Paragon when seeking clarification.

**Review and Follow-up on Advisory Board's previous recommendations, data requests, and action items:**

Steven Markowitz read the Board's recommendation that DOL provide instructions to CEs, IHs, and CMCs to note in the claims file if there is evidence that a claimant's employment led to their duties being performed widely across a site and that consideration be given in establishing toxic substances exposure and causation for exposures that are site-wide and not limited
to their work area of record. This recommendation was turned down by DOL because their position is that broad-based generalizations are not appropriate in the absence of specific evidentiary support for particular labor categories. CEs are trained to consider the evidence of the file specific to the individual claimant and use that data to link the particular employee to potential exposures. The Procedure Manual also provides clear guidance to CEs that examination of exposure is a holistic effort that considers information from many sources that can be considered if needed. DOL will consider any specific information provided by the claimant during the collection of evidence and assign exposure based on data that reasonably connects an employee to a specific toxic substance through a labor category, work process, incident, or other factor. Chair Markowitz noted that this is the third time the Board has made some form of this recommendation and each time DOL has disagreed with the Board.

The Board had submitted an information request to DOL on the number of times IHS were sent files for review in the time period of 2019-2022. The data they received for this period showed the same results as those presented earlier by Mr. Vance for Q1 referrals, that a very high proportion of claims were going to the IH.

The Board had asked about malignant mesothelioma, a cancer uniquely related to asbestos exposure. They were interested in whether data could be used to better understand the job titles at risk for asbestos exposure and consequent illness. DOL provided data showing there were 40 mesothelioma claims during the relevant time period (2018-2022), 35 of which were accepted and 5 denied. It would be of interest to know what the claimants' job backgrounds were, but it would not answer the question the Board had, which was whether other job titles should be added to the Procedure Manual for a presumption of significant asbestos exposure.

The Board had requested the new quarterly medical examiner reports. Prior to 2020, the Medical Director of DEEOIC would review 50 claims per quarter to look at the adequacy of the CMC reports and the Board would periodically review the results of these analyses. DOL had responded that they are working on a new system for this.

The Board had requested information about the SEM and how the contractor operates it. DOL previously sent the Board documentation on Paragon's guidelines for updating the SEM,
which provided some clarification.

The Board had requested clarification on the instructions in the Procedure Manual regarding post-1992 tunneling and its consideration for silica exposure and silicosis. As Mr. Vance explained earlier in the meeting, this has been corrected.

**Quality of IH and CMC Reports:**

Chair Markowitz presented a draft recommendation on assessing the validity of CMC reports and provided some background on why this recommendation was necessary. There are legitimate differences of opinions between CMCs, but a quality assessment of reports is needed to identify when a given report falls outside that acceptable variation. There is a subset of reports produced by CMCs in which the opinions expressed are simply wrong. This subset is probably less than 20%, but it is likely not a rare phenomenon. This recommendation encourages the program to develop a way in which CMC errors can be detected and corrected, which already exists in the IH process.

Dr. Vlahovich said that it can be difficult to figure out to whom a case should be sent. Currently, it is up to the CMC’s to refuse cases that fall outside their scope of expertise. In the cases he has reviewed, he could see that the CMC's specialty was occupational medicine, but he could not tell what particular niche the physician's expertise was in.

Dr. Cloeren wondered whether the idea of the referee opinion might be leveraged for this purpose. Mr. Vance said that referee opinions are done by the same contractor as the CMC reports.

Ms. Splett asked if the intent was to do an audit or if it would be a continual process checking every opinion that comes in. Chair Markowitz said that is up for discussion. An audit would probably suffice, but if an unacceptable percentage was found, a broader approach would need to be considered.

Dr. Cloeren said that they may not be able to say one opinion is correct and another not, but they could assess inter-rater reliability. Chair Markowitz said his problem with inter-rater reliability is that it applies to populations and research that are structured as such, but this is about finding CMC reports that are simply wrong. Dr. Cloeren suggested looking at cases where the CE reversed the original CMC decision after reviewing other information. This might give DOL a pool of cases to review in which CMC errors were prevalent. Chair Markowitz thought this
would be a relatively small number of cases and would not provide a look at the much broader number of CMC reports.

Dr. Friedman-Jimenez said they could look at the quality assurance model in which charts are reviewed or cases are evaluated looking for very specific things.

Dr. Bowman said if the stated goal is to identify cases in which there was a clear error in judgment by the CMC, the Board probably needs to advise on statistical approaches that can be used to determine how many cases need to be randomly selected to ensure that these errors are not occurring at a higher level than is deemed to be appropriate. Chair Markowitz did not think that was necessary at this stage, but if DOL accepts the recommendation and wanted assistance the Board could provide it.

Dr. Van Dyke said this is a huge task and it might make sense to limit it to cases that were denied. If they had access to the denial letters and could see the reasons, the sampling could be based on that. The most important thing is that inappropriate denials are avoided. Marek Mikulski said they could also begin with decisions that were marked as being not well-rationalized.

Chair Markowitz wondered whether DOL should integrate this quality assessment function into the current contractor that hires the CMCs or if it should be done by a separate party. He did not know how they could avoid the appearance of a conflict of interest and would feel more comfortable if DOL hired consultant physicians independent of the contractor to review them and make determinations. Dr. Bowman agreed with this and thought it would contribute to building public confidence in the assessments.

Dr. Friedman-Jimenez was also concerned about applying this only to denied claims and thought they could do a certain percentage of both denied and accepted claims.

Mr. Vance cautioned that individuals looking at this process could come back with recommendations that do not align with what the Board wanted or expected. Board members discussed the potential merits and pitfalls of limiting review to denied claims only or including accepted claims as well. Dr. Van Dyke said that the reviews should not be anonymized because if they find claims that were inappropriately denied and no action is taken, this would not be a worthwhile exercise to undertake. Mr. Vance said that if DOL is presented with reason to believe a claim was erroneously denied, the denial would be vacated and
the case would likely be sent back for further development.

Dr. Bowman asked if there was a way that this process could be done rapidly, such that it could be done before a decision is made. Mr. Vance said it would be exceptionally difficult because they would be inserting themselves into the development of individual cases as they move through adjudication.

Dr. Friedman-Jimenez suggested doing evaluations prospectively and evaluating the results before a final decision is formally made. Chair Markowitz did not think they should get to that level of detail in this recommendation, but if it is accepted the Board could consider that option.

Dr. Cloeren suggested doing a de-identified sampling of accepted cases to avoid the opportunity for reversing an accepted decision.

After some minor edits, the final version of the recommendation read: The ABTSWH recommends that the EEOICP implement a mechanism to evaluate the validity and accuracy of the opinions and rationales that are expressed in the reports of the CMCs in the claims evaluation process, with particular attention paid to the issue of causation of disease. This process may most usefully be applied to denied claims, but might also be applied prospectively to a number of claims under evaluation. This mechanism should have sufficient independence of the current method of developing and obtaining CMC opinions in order to avoid actual or perception of conflict of interest.

Chair Markowitz made a motion to accept the recommendation. Dr. Bowman seconded the motion and it passed unanimously.

**Case Review:**

Board members reviewed the cases they were assigned and discussed their findings for cases -2157, -2347, -0014, -7539, -7716, -7755, -7016, -8387, and -9787.

**Hearing Loss and Dementia:**

Mr. Key and Chair Markowitz presented their review of a medical report linking hearing loss and dementia. Mr. Key asked if DOL has individuals who routinely review outside medical studies on illnesses. Mr. Vance said there is a federal toxicologist that looks at health effect information, as well as research into causative standards in health effects. Chair Markowitz discussed
his own cursory review of the topic of hearing loss and cognitive impairment, which would fall under what the program calls a consequential condition. Hearing loss may be caused by exposures at a DOE site and then an impacted individual may develop cognitive impairment or dementia as a consequence of the hearing loss. Chair Markowitz presented one of the many studies looking at whether hearing loss causes dementia or cognitive impairment. The study followed a cohort over 18 years and found that a much larger percentage of the group that experienced hearing loss developed dementia compared with those that did not experience hearing loss. This does not necessarily amount to causality; other studies done different ways and evaluating other factors would need to be considered first. Several possible explanations were proposed for why hearing loss causes dementia, so there is some plausibility to there being a connection.

Mr. Vance said that the standard for consequential illness is not the same for causation under Part E. It is a matter of medical rationale provided by a physician who is considering all the different factors that are involved with an individual that has work-related hearing loss. It could be that a physician consulting the scientific literature and other information could make a salient argument that a claimant's dementia could have been significantly accelerated because of work-related hearing loss. That would be a sufficient basis upon which DOL would be able to accept a case.

Given that there is already procedural guidance on how to address this process for causal relationship in the disease exposure component and the causal component, Chair Markowitz did not feel the topic was worth pursuing by the Board as the program does not need any thorough analysis that demonstrates the link to support their decision-making.

Dr. Cloeren asked about a presumption for claimants with dementia and accepted work-related hearing loss claims. Mr. Vance said that the Board could consider this as a recommendation. It would be similar to what occurred with the COVID-19 standard, that if certain conditions are satisfied, the program would be in a position to accept claims automatically. The Board could do this with a variety of medical conditions.

Public Comment Period:

Stephen Towler said that he has managed his mother's healthcare for the last ten years under EEOICP and asked if the program
would re-evaluate an accepted claim after a disease has progressed and other symptoms/impairments become apparent. Mr. Vance said that when a condition has worsened or has caused a separate diagnosed problem, there is a process for filing a new EE-1 for an employee seeking coverage for that consequential illness. Guidance is available online in Chapter 23 of the Procedure Manual, which provides details on how to file these claims and the process by which the program would evaluate the claim for adjudication.

Robert Marcinko commented on his work history at INL, particularly on encountering multiple health and safety violations in the early 1980s when there were no controls on any of the chemical hazard activities. When he moved on to other DOE sites he found that many of them were in no better condition than the Idaho Chemical Processing Plant (ICPP) was years prior. DOE was well aware of the issues he worked on at ICPP but that information was not communicated to other facilities to address similar issues. DOE is embracing DEEOIC as something they are morally and ethically need to do, but they were negligent in the early days. They had contractual obligations to impose on their contractors that they did not uphold. There are a lot of employees out there that were exposed unknowingly and routinely.

Ralph Stanton was exposed on November 8, 2011, at the Zero Power Physics Reactor Facility during an uncontrolled airborne release of plutonium-239 and americium-241. He spent eight months in the basement of the facility and is now an Acute Radiation Syndrome (ARS) survivor. The 16 affected workers were initially told they had influenza; then they found out that their white blood cell count was down to nearly nothing after five hours, which would indicate a triple-digit dose. When Mr. Stanton was given his dose assignment, he said that it was immediately apparent that it had been falsified, which he was later able to prove with the help of NIOSH dose experts. He successfully filed a whistleblower complaint along with another coworker. It is a conflict of interest to allow the contractor, who is financially motivated to show low dose assignments and to destroy exposure evidence, to have control over the medical tests and documentation. He offered his services to teach the Board on how to spot these kinds of manipulations. In the EEOICPA regulations, he claims that it states that 98% of all radiologically induced cancers within the DOE complex were deemed to be caused at safe levels. This indicates that there is a lot of dose falsification going on, and not just at INL. He went on to discuss the positive results he realized from chelation therapy, which he would also be happy to share more
Sandra Thornton sent in an email to be posted for public comment in regards to Case 50024054. She has decided that, no matter how hard she tries, the system is not going to fix the rest of this case. Her next step will be to go to Washington to speak with key committees in order to effect change. This Board works very hard, but there is only so much they can do.

Calin Tebay discussed his primary role at the Hanford Workforce Engagement Center (HWEC) educating current and former workers and their families on potential programs that may apply to them. They have had 15,500 communications with people that want to file new claims or have previously been denied. Their single largest problem is still work history. HWEC relies on resource centers, and if the work history is not captured correctly, the information is tainted. They have learned how to communicate with people to elicit aliases from them, as well as processes and where they worked, in order to get this documented from the beginning. When the resource center staff does not know the site they are claiming for or the trades and processes worked there, they will likely not get the work history correct. He liked the proposed Exposure Assessment Form and thought it was a step in the right direction, but he did not see a way they would get things truly correct until an interview process happens at the IH or CMC level. When a denial is issued, the burden is on the claimant to rebut the information, which is nearly impossible to overcome. He is happy that the Board continues to have these conversations and work on this issue, but claimants are struggling because there are a lot of holes in the process that still need to be filled. Chair Markowitz noted that there is a process by which the claimant can request an interview to give additional detail on exposure. Mr. Tebay said he feared that if there was an IH interview that did not include a CE or someone from DOL, they are not going to capture all the information.

Jodi Stanton further elaborated on her husband, Ralph's, circumstances and issues at DOE facilities. Things are happening that are not right and affect families, and something needs to be done to change the practices that are going on. People's lives are permanently changed and damaged as a result of these actions. The accident should have never happened and the subsequent response from INL should not have been allowed. There need to be changes, not just for her family, but for all the other workers who have been exposed and do not even know it.

Jack Stanton is Ralph Stanton's brother. He discussed the
mishandling of his brother's case and what he characterized as
criminal acts on the part of the contractors. He stated that the
corruption in the system has far-reaching effects on an
employee's career and life after they have been exposed. DOE has
allowed its contractors to lie about incidents at the facilities
and keep employees' information from them. The management
officials who falsified information or looked the other way
received promotions and other career opportunities. At some
point, the government needs to get serious about worker safety
and start prosecuting people for putting other's lives in
danger. His brother proved to NIOSH that his records were
falsified; at that point, there should have been an
investigation into the people responsible. He described many of
the conditions and issues that he has become aware of at INL and
stressed the importance of holding the people liable for what
they have done.

Hal Simmons is the father of Brian Simmons, who was exposed
during the incident at INL and has since deceased. The
management and medical professionals at INL that were at the
site on the days following the incident are not honest people.
They told the contaminated workers that they had influenza and
kept them in the basement for eight months. These people should
be held responsible for their actions. Mr. Simmons relayed his
communications with Brian after the accident, including when he
was asked to sign an incorrect accident report. The deeper one
digs into this issue, the more problems become apparent.

Tami Thatcher is a former safety analyst at INL. She followed
the events surrounding the accident and studied the reports when
they were released. Because INL did not have a procedure for
translating lung counts into a dose, the lung count results were
given to Oak Ridge to translate. That report excluded Ralph
Stanton's first day's lung count, which would have shown a six
rem whole body dose over the annual limit. There were error
messages in the reports and many irregularities in the lung
counts. The software for the lung counts allows the operator to
input gain factors to tweak the results. NIOSH should never
accept results from any site as being honest for lung counts.
Mr. Stanton's actual dose was far higher than six rem, but
Battelle's final dose for Ralph resulting from this incident was
102 millirem. That is 100 times too low.
Mr. Jansen called the second day of the meeting to order at 8:30 a.m. and reviewed the day's modified meeting agenda. Chair Markowitz led the Board and attendees in a round of introductions.

**Review of Public Comments:**

Chair Markowitz pointed the Board to a written comment submitted by Donna Hand concerning the medical findings of chronic beryllium disease. It was a listing of medical findings from the Agency for Toxic Substances and Disease Registry and no comment was made on the findings. The implication seemed to be that their findings were broader than what is in the Act or what is used by the program.

Dr. Bowman said that a theme he saw from the comments was aneed for IHs or CEs to reach out to claimants to get additional information, which gave emphasis to the Board's own discussion on this topic.

Chair Markowitz discussed Mr. Marcinko's comments on the relative lack of control of exposure to salient toxic substances. It made him wonder how much of that is captured in DOE's records and documented for the purpose of claims review.

Dr. Van Dyke discussed Mr. Tebay's comments on the use of an interview system, which is something the Board has discussed repeatedly. The comments indicated that the exposure interview process is not being used. Chair Markowitz said the procedure is that if an interview is requested, either by an IH or a claimant, it is the CE who conducts the interview. When the Board last asked about the mechanism, it was rarely used. Mr. Vance said it is being used primarily where there are contentious arguments over the extent of exposure. It has been used to resolve situations that have resulted in positive outcomes for certain cases. In other cases, the interview has worked against the claimant, because when they are asked specific questions about the extent of their exposure, the IHs are also collecting information that may not necessarily be beneficial to the claimant. Chair Markowitz requested that DOL provide the Board with the number of interviews, either initiated by the program or by the claimant, that have been conducted each year over the last three years.

Dr. Cloeren said that if the process is that the IH submits questions for the CE to ask the claimant, they are missing a
good opportunity for the IH to be able to ask follow-up questions. Mr. Vance said the IH is part of the conversation with the claimant. The IH and CE coordinate as to what they are seeking information about. Mr. Vance walked through the steps of the interview process. In most of the interviews he was aware of, the interview has always been some sort of debate or request for clarification over the extent of the exposure that has been assigned by the IH.

Mr. Key asked if the claimant is provided with the list of questions in advance of the interview, to allow them to recall their memory and better inform the CE and IH of the activities they performed. Mr. Vance said they alert the claimant or their representative about the nature of what they are going to be pursuing, but he was not certain if they provide the questions in advance. Mr. Key said that he would expect to get the list of questions a week prior to the interview.

Review of Changes in Procedural Manual 7.1 Transmittal EEOICPA 9:0023-02:

Chair Markowitz discussed one of the changes in the Procedure Manual concerning the addition of a new category between incidental and significant levels of exposure: "more than incidental but less than significant." He believes that, given the prevalence of insufficient information, this new category is going to be used a lot, intensifying the need for getting the best and most complete information possible.

Dr. Van Dyke thought this category would just replace the very low significant exposure, which they see frequently. The Board previously discussed that it was essential to determine whether an exposure was significant or incidental because that is a trigger for other things. This policy adds a layer of gray between those two categories. He asked DOL what prompted the change and what purpose it serves. Mr. Vance provided a summary description of what occurred. DOL has spent considerable time trying to figure out how to characterize this exposure in such a way that makes sense from an IH perspective. There will be situations where employees are routinely working with hazardous material but not in a way that is going to result in a significant exposure because there were mitigation thresholds in place. The reviewers are looking at these cases for evidence of protocol violations or other occurrences that could have presented an exposure threat to the employee. It is a complicated issue and DOL would welcome any input from the Board.
Chair Markowitz said the program previously used 1995 as a dividing line, after which better standards were in place and applicants had to prove there was an excess exposure. The Board pointed out that this did not necessarily correspond to reality. DOL replaced that policy with "does not exceed regulatory standards," which was problematic for a number of reasons and itself was ultimately removed. The program currently has a new category that indicates there was an exposure but it was not significant. Significant is a very important word in this program because it can trigger presumptions on how the claim is evaluated. He understands the problem the program faces, but thinks this categorization of exposure is going to communicate to the CMC that this is not important exposure. Their challenge is to get the IH's understanding as close as possible to what the worker actually did, but this new categorization does not necessarily advance that.

Dr. Bowman commented on how the CMC might interpret this new term. As he understands it, it is for exposures that might have otherwise been deemed significant if other controls were not in place. There should be some specification that that is what the category means; then if a CMC sees a medical condition that is highly consistent with an exposure to that substance it would imply that the controls were not sufficient.

Ms. Whitten disagreed with the 1990s date for determining when DOE implemented better controls. On the Board's tour of INL prior to the meeting, they heard that there were no beryllium controls until 2011 in one of the facilities they visited. At the Hanford Site Tank Farms, they had to stop work in 2015 because of how many vapor exposures were occurring, and the company had done nothing to protect workers. Emphasizing the 1990s date seems like it is teaching IHs to disregard what was actually happening. Mr. Key said that DOE and their contractors have always been slow to implement any regulatory change from outside agencies. Therefore, the contracted IHs and CMCs need to understand that even though a chemical was outlawed on a particular date, DOE and its contractors had voluminous inventory of these chemicals that continued to be used until a replacement solvent could be purchased and the existing inventory was depleted.

Dr. Friedman-Jimenez said that the significant/incidental classification is, in practice, a part of the larger causation analysis. It is not just a function of how much exposure or the type of exposure, but whether that exposure is potentially
sufficient to cause the disease. There are other members of the team that should have input into the causation decision beyond the IH. He provided an example of an exposure that could easily meet an IH's definition of incidental but has been reported to be fatal with proven causation. He suggested tabling the discussion on how to use the terms "significant" and "incidental" and including it in a larger deep-dive discussion by the Board or a working group focused on causation analysis in the compensation process. Chair Markowitz suggested folding this topic into the Working Group on Significance, and the Board agreed.

Mr. Vance said that DOL characterizing an exposure using this criterion does not mean that a physician is unable to interpret the information in a way that would allow for a compensable finding. If the doctor can fashion an explanation of the exposure that reasonably convinces the adjudicator that there is a compelling relationship, the case will be approved. The question is how DOL should communicate this information to a physician so they are well-informed and able to come to a good interpretation of the evidence.

**Case Reviews (continued):**

Board members continued discussion of their reviews of the cases they were assigned. These included cases -7855, -7904, -8666, -2282, and -8472.

**Additional Discussion of Day 1 Topics and Board Work Plan:**

For the purpose of brainstorming, Chair Markowitz brought up a topic that was briefly discussed on Day 1. There have been over a hundred new SECs developed in the last 20 years. When they are created, DOL informs previously denied claimants who may now be eligible for compensation. This seems to be an appropriate process and fairly easily done. On the toxic substances side of this, the SEM is continually improved with new data from the sites, but when the new information is integrated into the SEM a parallel process of informing previously denied claimants that they may now be eligible based on new information is not being done. Chair Markowitz proposed a possible explanation for why this would be challenging to do, but the Board can seek further clarification from DOL on why it is not done. Ms. Whitten agreed, and thought a good opportunity for implementing it would be when and if Senator Murray's bill gets passed in Congress to align DOL's beryllium sensitivity testing with the State of Washington and DOE. Mr. Key said that when any changes to the
SEM are proposed, they should first come to the ABTSWH and that a bulletin should be issued prior to implementation advising of the specific changes. Dr. Van Dyke said radiation and toxic substances are similar but very different. At a minimum, if the beryllium bill passes, or if there are new exposure-disease relationships established, those should be looked at. Looking at claims that were denied based on a particular diagnosis and trying to figure out a way to do that every time the SEM is changed would be very difficult. Dr. Cloeren agreed that it would be impractical to do this based on changes in the SEM, but more visibility is needed around how the SEM is changing. There is a change plan that the Board should review. When a policy changes that would affect eligibility, that is more practical and should be done to look at claims that would be affected by policy changes. Chair Markowitz did not think most changes in the SEM would lead to previously denied claims being accepted, and alerting claimants that they might be eligible for reconsideration would likely lead to a lot of disappointed claimants.

Dr. Friedman-Jimenez pointed to the change of adding IARC Group 2A probable carcinogens to the list in the SEM. This kind of substantial change could significantly impact compensability for claimants with cancer. He asked for a status update on the addition of these probable carcinogens. Mr. Vance said DOL has made all the changes that the Board recommended for added health effect information and confirmed those changes in a written response to the Board.

Ms. Splett said that DOL held public meetings near Hanford when the Part B SECs were changed and independently reached out to every claimant about the meetings and what process they should follow. Something similar could be done, but expecting the public to keep up with SEM changes is not plausible. Chair Markowitz asked what challenges are involved on the toxic substances side when the SEM is changed. Mr. Vance said doing automatic data screening to determine which cases are potentially impacted by a change to the SEM will always be a challenge for DOL. Doing this would involve a manual review, with CEs taken off of their normal case adjudication work to look through the inventory of potentially impacted cases. There are still many other variables and parameters that would need to be considered, and they would have to figure out the criteria for looking at those cases to assess the likelihood that the change would affect the outcome of the case. There would be a tremendous administrative burden in doing this work and they would need to determine what the benefit would be versus the
cost of doing it. The Board agreed that this is a topic they
want to continue to discuss. The topic was assigned to the SEM
Working Group and one of their first steps should be to engage
with DOL to get a better understanding of the challenges.

Dr. Bowman requested he be moved from the Significance Working
Group to the SEM Working Group, since that group is discussing
the addition of toxicants to the SEM. Mr. Key volunteered to
join the SEM Working Group. Dr. Bowman said it would be useful
to have a member from the Medical Community in the SEM Working
Group; Chair Markowitz said one will volunteer once they have a
chance to caucus. He also said that the working groups should
meet before the next meeting and encouraged them to schedule it
soon.

Chair Markowitz will write up a rationalization for the Board's
CMC quality assessment recommendation. A member of the team that
worked on the IH Exposure Assessment Form should write a short
rationalization on it. These should be sent around to all of the
Board members and submitted to DOL within a couple weeks
following this meeting.

The Board will meet next in the fall at a location yet to be
determined.

Dr. Friedman-Jimenez asked about getting case files as a
searchable pdf. Mr. Vance said that what the Board receives are
image copies of records out of the OWCP imaging system. It does
have an indexing capability, although that does not get
reflected in the material the Board is provided. They have
explored other options, but the only way they can facilitate
this in a timely manner is this raw format. The system does not
allow them to categorize the material in any kind of download
they do. Chair Markowitz said that one solution for the Board is
to request that they be provided with a table of contents that
identifies the documents of interest.

Chair Markowitz noted that the Board has previously requested a
supporting contractor for two types of work: to review a
significant number of claims, and to provide some scientific
support so the Board could assist DOL in updating exposure-
disease links and similar activities. Mr. Jansen said that
because funding for a technical support contractor was not
approved this fiscal year, OWCP is not in a position to move
forward with efforts to secure a contractor for the Board at
this time. Chair Markowitz asked when this can be revisited for
the next fiscal year. Mr. Jansen said the normal budget cycle
would typically start over the summer and should probably be discussed before the next meeting. Dr. Bowman asked if the budget was requested and denied, or if there just isn't a line in the budget for a contractor. Mr. Jansen said that all he could say was that the funding was not approved. Chair Markowitz said they should hold a brief telephonic meeting over the summer to discuss making a recommendation on requesting a contractor.

Dr. Bowman noted that the Board's term is expiring in December 2024. He asked if there was utility in the Board making a report for Congress detailing what they have accomplished and why they believe they would remain useful beyond the end date. Chair Markowitz said that, by charter, they provide advice to the Secretary of Labor, so if the Board thinks it is worthwhile for it to continue to exist beyond 2024, they can communicate that to the Department. Ms. Whitten noted that Senator Murray's bill included a request to extend the ABTSWH's charter until 2029.

**Close of Meeting:**

Mr. Jansen adjourned the meeting at 10:55 a.m.

I hereby certify that, to the best of my knowledge, the foregoing minutes are an accurate summary of the meeting.

Submitted by:

[Signature]

Steven Markowitz, MD, DrPh
Chair, Advisory Board on Toxic Substances and Worker Health
Date: 8/16/2023