UNITED STATES DEPARTMENT OF LABOR

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ADVISORY BOARD ON TOXIC SUBSTANCES AND WORKER HEALTH

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SUMMARY MINUTES

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NOVEMBER 30-DECEMBER 1, 2022

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The Advisory Board met at the JW Marriott Las Vegas Resort & Spa, Cataluna Room, 221 N. Rampart Boulevard, Las Vegas, Nevada, 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
LORNA ZABACK

DESIGNATED FEDERAL OFFICIAL

RYAN JANSEN

^{*}Present via video-teleconference

WEDNESDAY, NOVEMBER 30, 2022

Welcome/Introductions:

Mr. Jansen called the meeting to order at 9:01 a.m. and welcomed attendees to the meeting. He reviewed the meeting and public comment period logistics and instructed attendees how to find meeting-related information on the Board's website. He introduced the Board Chair, Dr. Steven Markowitz, to introduce the members of the Board.

Chair Markowitz welcomed Advisory Board members, federal staff, and members of the public to the meeting. The day prior, the Board was given a tour of the Nevada National Nuclear Security Site, formerly known as the Nevada Test Site.

The members of the Board introduced themselves for the record. There are several new members of the Board for whom this is their first public meeting. These members are Dr. Marianne Cloeren, Gail Splett, Dr. Kevin Vlahovich, and Lorna Zaback. Dr. Cloeren is a medical doctor with specialties in internal medicine and occupational medicine. She is an associate professor at the University of Maryland School of Medicine. Ms. Splett worked at the Hanford Site for over 40 years. In her last decade of employment she served as EEOICPA and Former Worker Medical Screening Program manager. Dr. Vlahovich is a medical doctor with specialties in preventive medicine and occupational medicine. He is director of the University of New Mexico Employee Occupational Health Services. Ms. Zaback has been employed at the Hanford Site for over two decades and works in the EEOICPA program office.

Office of Workers' Compensation Programs (OWCP) Director's Welcome:

Christopher Godfrey, Director of the Department of Labor (DOL) Office of Workers' Compensation Programs, introduced himself to the Board. Mr. Godfrey spent much of his career before entering federal service as a worker compensation attorney. He previously served as the Iowa Workers' Compensation Commissioner before he took a job with DOL's Employees' Compensation Appeals Board (ECAB), which is an appellate-level board for federal employee workers' compensation claims. He was eventually named chief judge and chairman of the ECAB, and he served in that role until being named OWCP Director by President Biden in 2021.

Mr. Godfrey's first actions were to expand the front office with

the hiring of a transformation officer and diversity, equity, inclusion, and accessibility (DEIA) officer. The transformation officer is tasked with improving customer service and service delivery. The DEIA officer works to ensure DEIA principles are incorporated through OWCP. OWCP will also be bringing on an ombudsperson in the near future to help monitor the performance of the claims process.

OWCP has four priority areas: strengthening the customer experience and service delivery so that they are efficient and equitable; championing the role of workers' compensation programs in ensuring America has good jobs and trustworthy social safety; evolving OWCP into a model workplace that attracts and fosters diverse, well-trained, and motivated employees; and to instill an organizational culture of collaboration, communication, and responsiveness that strengthens OWCP's performance.

With regard to the Energy Workers Program, Mr. Godfrey sees this unit as a model office within OWCP in terms of the quality of their work. He thanked the Advisory Board for their efforts to help OWCP and DOL better support workers.

Review of Agenda:

Chair Markowitz briefly provided an overview of the Board's agenda for its two-day meeting. The agenda includes briefings from federal staff on activities at the program level, a history of the Board and its statutory purview, an ethics briefing, an extensive Board discussion session, and a public comment period.

Energy Statute/Creation of the Advisory Board:

Amy Liefer, a senior attorney in the DOL Office of the Solicitor's Division of Federal Employees' and Energy Workers' Compensation (FEEWC), delivered the presentation on the role of FEEWC and the legal framework and history of the Energy Employees Occupational Illness Compensation Program Act (EEOICPA). She began by giving an overview of her office. FEEWC is responsible for providing legal support for OWCP's administration of EEOICPA-related activity, which includes assisting with statutory interpretation questions, issuing formal and informal legal opinions, reviewing agency policies and procedure, and litigation associated with EEOICPA.

EEOICPA was passed by Congress in 2000 to provide medical benefits and compensation for employees who worked in the

nuclear weapons industry. The Act has two relevant parts, Part B and Part E, which differ in available benefits and eliqibility requirements. Part B provides uniform lump-sum payments and medical benefits to current and former employees, or their survivors, of the Department of Energy, its predecessor agencies, and certain of its vendors, contractors, and subcontractors, who are diagnosed with a radiogenic cancer, chronic beryllium disease, beryllium sensitivity, or chronic silicosis as a result of their exposure to radiation, beryllium, or silica while employed at covered facilities. Congress delineated eligibility criteria under Part B for establishing a diagnosis of beryllium-related lung diseases and chronic silicosis that must be met in order for a claimant to be eligible for benefits. Congress also included statutory presumptions for workers' exposure to silica, beryllium, and radiation. Part E provides medical benefits and variable lumpsum payments based on a worker's permanent impairment and/or qualifying years of lost wages for covered DOE contractor and subcontractor employees and, where applicable, their survivors. In contrast to Part B, Part E is more expansive in the types of covered illnesses and does not contain any Congressional diagnostic criteria for establishing an illness. Both parts also have provisions governing Radiation Exposure Compensation Act, or RECA, claims for certain classes of laborers.

Under the Act, OWCP is responsible for adjudicating claims and issuing benefits, while other federal agencies are responsible for other portions of the Act. The Advisory Board on Toxic Substances and Worker Health was created via a 2014 amendment to the EEOICPA. Ms. Liefer briefly reviewed subsequent congressional amendments that extended the life of the Board through 2024 and expanded its activities. Broadly put, the role of the Board is to provide advice to the Secretary of Labor on five specific areas. These are: the DOL Site Exposure Matrices (SEM); medical quidance for claims examiners under Part E; lung disease-related evidentiary requirements for claims under Part B; reviewing the work of DOL industrial hygienists, staff physicians, and consulting physicians to ensure quality, objectivity, and consistency; and the claims adjudication process generally. The Board may also provide advice on other matters at the discretion of the Secretary.

Ms. Liefer concluded by noting two important changes to the Board that took place in 2020. That year Congress mandated DOL to provide the Board with access to any information that the Board considers relevant to carry out its responsibilities, and to make available the Program's medical director, toxicologist,

industrial hygienist, and program support contractors. The amendment also requires the Secretary of Labor to publicly state whether he or she accepts or rejects the Board's recommendations, and to provide either a timeline for when those recommendations will be implemented or the reasons why the Secretary disagrees with the Board's recommendations.

Chair Markowitz asked for process information on how the Board's lifespan got extended, why Board member terms were set at two years, and what the process would be to consider lengthening both. Ms. Liefer said she would look into those questions and get back to the Board. Joseph Plick, Federal Advisory Committee Act (FACA) counsel in the Solicitor's Office, said the Department is responsible for initiating the re-chartering process. He added that two- or three-year terms are fairly common across federal advisory committees, but he did not know if this Board's terms were set by statute.

Federal Advisory Committee Act (FACA) Review:

Mr. Plick delivered the presentation on the Federal Advisory Committee Act. FACA itself dates back to 1972, but the federal government has been using advisory committees throughout the nation's history. Over time, however, concerns arose about lack of rules and transparency surrounding these committees. While Congress acknowledged that federal agencies have a justifiable need for balanced external advice and expertise, FACA was designed to provide some accountability and transparency on how that advice is given. FACA includes rules that govern the establishment and operation of these committees, which must provide relevant advice that adheres to their statutory mandate. FACA ensures that committees meet and deliver their findings in a timely and cost-effective manner. Under FACA, advisory committees can be established by Congress or the President. FACA also requires that committees have balanced memberships, hold their meetings in public, and maintain records of their activities, particularly meeting summaries. Mr. Plick also discussed the role of the agency in supporting the functioning of the committee and the role of the designated federal official. Management of all federal advisory committees is handled by the General Services Administration, which receives annual reports and maintains FACA-related material. Mr. Plick also described the rules for holding closed meetings, which occurs very rarely, and has never been needed for this Board. FACA also allows for advisory committees to form subcommittees, which are not required to hold public meetings as long as the work that they do is reported publicly through deliberations at

the parent committee meeting. Similarly, not all activities are required to take place during public meetings, such as preparatory work like drafting recommendations, so long as that work is reported to the parent committee at the public gathering. Finally, Mr. Plick noted that FACA requires that all committee records be made available publicly, subject to Freedom of Information Act (FOIA) exemptions.

Chair Markowitz asked Mr. Plick if FACA lays out any rules for how communication between a committee and its federal agency should look, or whether that has to be worked out between the committee and the agency. Chair Markowitz expressed the concern that the Board does not convene frequently enough to nimbly respond to the proposed policy changes that have been sent to the Board by the Department, often on short notice. He raised the possibility of Board members submitting comments on these policies individually outside of formal Board deliberation and voting. Mr. Plick said that Board members can submit public comments in their individual capacity as members of the public, but those comments could not be considered Board advice per FACA.

Ethics Rules:

Vanessa Myers, a senior ethics attorney at DOL, briefed the Board on federal ethics rules that govern federal advisory committee members. To begin, she encouraged Board members to reach out to her team with any ethics-related question they might have during their service on the Board. Individuals who serve on federal advisory committees are classified by the government as Special Government Employees (SGEs), and they are subject to a series of ethics rules while they serve on their committee.

Ms. Myers first discussed the rules related to conflicts of interest. Board members should recuse themselves from any particular matter in which they, a close relative, employer, or business partner has a financial interest. All Board members filled out financial disclosure paperwork so that the Department is aware of any possible conflicts before they arise. Ms. Myers noted that failure to abide by the conflict of interest rules carries potential criminal consequences. Ms. Myers emphasized the difference between deliberations on a "particular matter" and general policy or recommendations that affect entire sectors. Personal conflicts of interest are similar but the covered relationships are more broadly defined to include friends, former employers, organizations, former clients, et

cetera. Most of these "former" relationships can be limited to within the past year. Again, Ms. Myers encouraged Board members to reach out with any questions in this regard.

There are also ethics rules regarding outside activities. Board members must be sure to not take on work that would require frequent recusal from Board matters such that their ability to effectively participate on the Board could be jeopardized. Board members are not allowed to receive compensation to speak, teach, or write if the invitation is related to their status as a member of a federal board, or if the invitation was made by an individual or organization with an interest in matters affected by the Board's work. SGEs are also prohibited from serving as expert witnesses in proceedings whose subject matter is related to their federal service, and from participating in lobbying activities related to their SGE role.

Ms. Myers also briefed the Board on the Hatch Act, which is a federal law that prohibits federal employees from participating in advocacy for or against political candidates, parties, or political groups while on duty or using federal resources. Unlike full-time federal employees, SGEs are allowed to conduct political fundraising activities and run for elected office on days or hours when they are not actively providing service to their committee. SGEs are also restricted from accepting gifts from individuals who have business affected by their committee, although small value gifts and gifts from individuals with whom the committee member has personal relationships are generally permitted. Other ethics rules that Ms. Myers discussed were the misuse of government resources and misuse of non-public information.

Overview of EEOICPA/Statutory Areas for the Board:

Rachel Pond, Director, Division of Energy Employees Occupational Illness Compensation (DEEOIC), delivered the presentation. Building off the overview provided earlier by Ms. Liefer, Ms. Pond provided further details on EEOICPA and the role of her division. The purpose of both the Act and DEEOIC is to protect the interests of workers who were injured or became ill on the job, or their survivors, by making timely, appropriate, and accurate decisions on claims, and providing prompt payment of benefits to claimants that are determined to be eligible. DEEOIC has strived over its existence to streamline and improve the claim process.

Ms. Pond detailed the compensation that is allowable under Parts

B and E, which are capped at \$400,000 for both parts combined. Compensation is disbursed as a lump sum payment. Claimants are also eligible for medical benefits for accepted medical conditions. Ms. Pond also reviewed the eligibility criteria for both parts, which are set out in the statute. Part B covers a broader array of workers, while Part E is mainly for DOE contractors and subcontractors. Part B is also more restricted in the types of medical conditions it covers.

Ms. Pond then discussed how DOL claims examiners verify the employment of claimants by seeking records from DOE, specific worksites and employers, and/or other federal agencies. DOL also has to confirm medical eligibility for claims, which can be a complex and challenging process. Part B covers cancer, chronic beryllium disease, chronic silicosis, and provides supplemental compensation for awardees under Section 5 of RECA, which covers workers employed in the mining, milling, or transportation of uranium ore. Chronic beryllium disease is defined in the statute and has been a focus of this Board in the past. Part E is considerably more open-ended and covers any condition that an employee could have contracted as a result of exposure to toxic substances. Ms. Pond said that this open-endedness has been one of the challenges for DOL; there are voluminous records and limited medical staff qualified to review claims. She noted that the Advisory Board has been of great help assisting DEEOIC in developing tools and providing oversight to improve the Part E claims process.

Ms. Pond went into greater detail on how groups of workers can be considered eligible for cancer coverage under Part B. One pathway is through Special Exposure Cohorts (SECs) which are for certain worksites with radiation-related cancer presumptions and terms of employment. New SECs are determined by the National Institute for Occupational Safety and Health (NIOSH) and administered by DOL. Ms. Pond also briefly described the Part B dose reconstruction process that NIOSH conducts for workers not covered by an SEC. She then shifted gears to discuss Part E eligibility. DOL has to establish that a claimant had an exposure to a toxic substance, and that it is "at least as likely as not a significant factor in causing, contributing to, or aggravating" the claimed illness. Much discussion with the Board has revolved around the definition of "significant factor," which remains an ongoing challenge.

One of the most important tools that DEEOIC has developed to assist in the Part E claims process is the Site Exposure Matrices. The SEM is a searchable database of facility-specific

inventories of toxic substances that can be used by claims examiners. The database is also publicly available. The SEM will be discussed in greater detail later in the day. Another important tool is the Occupational Health Questionnaire that claimants fill out early in the claim process. Both of these tools have been improved over the years in consultation with the Advisory Board.

Ms. Pond provided an overview of the claims adjudication process and timeline. Claims can be filed by mail, online, or in-person at one of the 11 Resource Centers around the country. The claimant then completes the Occupational Health Questionnaire and provides additional evidence to the claims examiner, if requested, such as medical documentation or employment records. The claimant's District Office then issues a recommended decision to accept or deny the claim. Claimants may appeal denials to the national Final Adjudication Branch, which can occur in writing or as a hearing. Claimants may re-open cases if new documentation is discovered after denial.

Dr. Cloeren asked if claimants who file under one part are automatically considered for the other. Ms. Pond said the claims examiner will do so if the claimant's employment history indicates potential eligibility for the other part. She noted that any claim accepted for Part B is automatically accepted for Part E. Jim Key discussed a case of a worker covered by one of the original SECs who developed cancer and filed a claim, but ultimately passed away not long after the claim was accepted. He expressed the hope that a fast-track claims review process could be established for SEC workers who develop cancer. Ms. Pond said expedited review does exist for terminal cases, but sometimes it can be a challenge to define terminal, and that is an issue the office is working to improve on.

Ms. Pond then discussed the staff involved in reviewing claims and supporting DEEOIC. These include industrial hygienists (IHs) and Contract Medical Consultants (CMCs) who serve as medical science experts and assist claims examiners in determining eligibility and, most importantly, causation. Ms. Pond emphasized that medical science staff do not make claims determinations; they provide information and medical opinions to the claims examiner to help them make their determination. The Board has played an important role in fine-tuning how the IHs evaluate evidence. DEEOIC also employs health physicists, registered nurses, and a toxicologist. The CMCs play an important role supplementing and interpreting the medical documentation submitted by claimants from their primary care

physicians, who usually are not experts in exposure and disease causation. CMCs also assist in impairment determinations, when requested by the claimant, and wage loss cases. Impairment is an important component of Part E, which allows for compensation based on percentage of whole-person impairment according to the American Medical Association guidelines for the evaluation of permanent impairment. Wage loss is a measurement of the decreased capacity to work caused by an accepted medical condition.

DEEOIC has been working to make it possible for claimants to submit more forms electronically and to conduct outreach to the community to keep people up-to-date on new features and policy changes. Ms. Pond noted the top five accepted conditions for both parts. For Part B, they are skin cancer, lung cancer, urinary/bladder cancer, colorectal cancer, and pancreatic cancer. For Part E, the top five are skin cancer, chronic obstructive pulmonary disease, lung cancer, silicosis, and hearing loss. Over the life of EEOICPA, over \$22 billion has been disbursed in total compensation and medical coverage.

Since the Board was established in 2015, the Board and DOL have worked together to develop important updates to the SEM to include health effects data associated with toxic substance exposures; redesign the Occupational History Questionnaire; develop new presumption standards for COVID-19, asbestos-related diseases, and hearing loss due to ototoxic substances; and refine language in the Procedure Manual related to asthma, the six-minute walk test, and IH exposure characterization. Ms. Pond noted that DEEOIC usually updates the Procedure Manual twice a year, but the Board can recommend changes to the manual at any point.

Ms. Zaback noted that skin cancer is the top accepted condition for both parts, but is not one of the 22 accepted cancers in the law. She asked if there is a way to update that list to include skin cancer. Ms. Pond said that because those cancers are specifically set out in the law itself, it would take congressional action for the list to be amended. Dianne Whitten asked why the claims examiner is limited to listing seven toxic substances when referring cases to IHs. John Vance, Branch Chief, Policy, Regulations and Procedures Branch, DEEOIC, acknowledged that workers might be exposed to a greater number of substances, but DOL has to account for the need to process claims in an efficient and timely manner given its caseload. The claims examiner lists the substances most likely to have a causal impact. He added that further substances can be added to

the profile when requested by the claimant. Chair Markowitz asked how the claims examiner whittles down the list, given that they are not an occupational health expert. Ms. Pond and Mr. Vance said they rely on the medical documentation provided by the claimant, the SEM, and other information in the case file. This is another instance where DOL has to form a balance so that IHs are not overburdened and may provide input in a timely manner.

Dr. Cloeren asked if the Occupational History Questionnaire is publicly available. Ms. Pond said it is, and is included in the Procedure Manual. Dr. Cloeren also asked if claimants whose conditions get worse over time can re-apply for further compensation. Ms. Pond said claimants can request a new impairment evaluation every two years until the statutory compensation cap is reached. Dr. Cloeren said it might be a good idea to develop a central resource for former workers to search through SEC classes for which they might be eligible. The Board also discussed with Ms. Pond some of the challenges of District Offices handling claims from sites not within its historical or geographical area of expertise. Ms. Pond said those issues are being addressed with training and will improve over time. Dr. George Friedman-Jimenez raised the issue of skin cancers caused by non-ionizing radiation, such as from sun exposure, which seems to be a gap that does not fall under the purview of this Board or the Advisory Board on Radiation and Worker Health. Ms. Pond agreed there is a gap, and that the statute does not account for those conditions which appear to be occupational but are not connected to toxic substances or radiation. Mr. Vance said the Board could play a role in developing a presumption for skin cancers caused by chemical exposures, but to expand the definition of toxics to include ultraviolet light would require Congress to amend the statute.

Chair Markowitz asked what percentage of claims over the last couple of years has been referred to an IH or the CMC. Ms. Pond said she did not have those numbers at hand, but her feeling is the number being sent to IHs has been increasing in recent years, and fewer are going to the CMC. Chair Markowitz also asked DEEOIC to submit to the Board the results of any audits of CMC performance that have been conducted since the Board last saw those reports. Chair Markowitz expressed his willingness to coordinate with the Advisory Board on Radiation and Worker Health on any matters where such coordination would be helpful. He also offered the Board's assistance to DEEOIC in developing any new presumptions under the Act. Ms. Whitten mentioned a case of a worker with a terminal illness that sounded like it had

been mis-adjudicated. Ms. Pond and Mr. Vance explained how the two-stage determination process is meant to mitigate any errors that occur, but they encouraged erroneous cases to be brought to DEEOIC's attention. The Board also discussed new presumption criteria for silicosis and how the fast-track process for terminal cases works.

Program Updates (Last 12 Months):

Mr. Vance delivered the presentation on recent program updates. Mr. Vance oversees the policy group that performs and publishes updates to the DEEOIC procedures, and also manages the Medical Health & Science Unit. The Procedure Manual (PM) is an important document that governs the claims adjudication process at DEEOIC, and, as Ms. Pond mentioned, it is updated twice yearly. Updates mostly are a result of issues that arise from day-to-day claims adjudication activity or because of recommendations or input from the Board. Mr. Vance emphasized that updating the PM is a complex process because of the regulatory, legal, and stakeholder vetting each change has to go through. Urgent updates can be made on an interim basis via Bulletins. Other informational guidance or personnel updates are issued in Circulars.

Mr. Vance reviewed the two PM updates, Versions 6.0 and 7.0, that occurred this year, in April and October. Version 6.0 designated claims examiners as responsible for managing the authorized representative appointment process and updated responsibilities for identifying and responding to potential conflicts of interest in the claims process, among other updates to clarify language in the PM. Version 7.0 officially added COVID-19 as a compensable illness if certain presumptive criteria are satisfied, added clarifications on the silicosis standard, adopted uniform formatting standards for decisions issued by the DEEOIC, and provided clarification for staff on how to interact with individuals with power of attorney for claimants, among other changes.

Mr. Vance briefly described the Bulletins that were issued over the past year, including Bulletins on the use of telemedicine for certain situations involving home and residential healthcare determinations, and another governing industrial hygienists' reporting of exposure levels to eliminate the categorization of exposures "within regulatory limits," which the Board had argued was vague and hard to define. Mr. Vance also noted several recent Circulars, including one that announced the Savannah River Site SEC and one to alert interested parties that

telemedicine was permissible for routine medical care provided it was allowed under state law. Mr. Vance highlighted two Federal Register Notices issued by the Department. One notice published an updated list of DOE covered facilities. The second laid out a set of expectations regarding the conduct of lay representatives in dealing with OWCP, and how staff should respond to inappropriate behavior.

Mr. Vance then touched on some of DEEOIC's efforts to facilitate electronic claims submittal. The main avenue for this process is the Energy Document Portal (EDP) through which claimants can file a new claim, upload documents to their case file, check the status of their claim, and complete their benefit payment forms if their claim is accepted.

Finally, Mr. Vance emphasized the important role the Board plays in initiating change and the valuable input it provides in support of DEEOIC's work.

Chair Markowitz raised the issue he brought up earlier with Ms. Pond about the Board's ability to provide input on policy changes before they are finalized. He acknowledged Ms. Pond's statement that Board comments on the PM are welcome at any time and can be incorporated at the next update, but he nevertheless believes the Board would benefit from being given sufficient time to comment when a specific update is initially being considered by the Department. One suggestion from the Board was to pre-schedule closed meetings to discuss proposed policy changes in draft form and/or discuss confidential information. Department staff noted that closed meetings can be more logistically difficult than open meetings, and expressed the concern that adding another procedural layer to the policy update process could lead to delays. However, the Department would work to try to find middle ground if the Board were to make that recommendation. Another idea was to use the intervening period between a Circular and its incorporation in the PM as the time for the Board to deliberate on the update being announced in the Circular. Chair Markowitz said the Board would discuss this further later on in the meeting in hopes of coming up with a recommendation for the Department.

Site Exposure Matrices (SEM) Demonstration:

Mr. Vance next demonstrated to the Board how the SEM and its accompanying website are utilized. As previously mentioned, the SEM is one of the most important tools for evaluating health effects and exposure data for EEOICPA claims. The website

contains educational material and resources to assist in using the SEM. The SEM is what is called a relational database, and it contains information based on data collection efforts at all of the Part E-covered DOE facilities. The database is consulted daily by DEEOIC staff and is maintained by a DOL contractor called Paragon, who also conducts data collection efforts on behalf of the Department. A great deal of effort went into gathering old, paper-based data from the early atomic weapons program and digitizing it to be useful in the database, but there is invariably other data that was missed. Mr. Vance stated that the public is welcome to submit data on exposures or toxic substances and the Department is always seeking new data. In response to a question from Dr. Cloeren, Mr. Vance said that toxic substances are defined as any radiological, chemical, or biological process for creating disease.

Users can search the SEM by facility. Mr. Vance noted that the public-facing version of the SEM is updated every six months after new data is cleared for public release; DEEOIC staff use a more real-time version that is constantly updated. In response to a question from Aaron Bowman, Mr. Vance said that the SEM generally does not have temporal information on when a specific substance was present at a site, only that the substance was present at some point.

Mr. Vance walked through a demonstration of how a claims examiner might utilize the SEM to gather information for a claim. As an example, he showed which toxic substances the SEM associates with chronic obstructive pulmonary disease for a hypothetical Nevada Test Site worker, which can be sorted by job type and/or job process (e.g., labor and/or concrete mixing). IHs can then use this data to develop a more descriptive characterization of the potential exposure that can be considered by a medical expert. Mr. Vance summarized the role of the claims examiner as identifying the priority targets for the toxic substance characterization by the industrial hygienist. He encouraged Board members to familiarize themselves with the SEM in their free team to get a better grasp of its capabilities.

In response to questions from the Board, Mr. Vance discussed how the SEM naturally changes over time as more data is added to the system. Mr. Key raised a concern that trichloroethylene is listed as a toxic substance for the laborer category at the Portsmouth and K-25 Gaseous Diffusion Plants, but not for Paducah, despite the latter plant having conducted the same work as the other two. Mr. Vance responded that the SEM is based on available documents and materials. He admitted it will never be

100% comprehensive given the age of many sites and recordkeeping disparities, but he encouraged anyone with information about particular facilities to submit that information to DEEOIC to make the database as accurate as possible. Dr. Vlahovich asked if the SEM accounts for PPE practices or standards at specific sites or time periods. Mr. Vance said it does not, but that is a factor that the IHs consider in their assessments. Chair Markowitz asked how the SEM accounts for changes in the state of the science regarding disease causation. Mr. Vance said DEEOIC relies on the Board to assist in the process of keeping the Department up-to-date on medical advances or new science. One such effort was the Board's review of the International Agency for Research on Cancer (IARC) list of probable carcinogens that resulted in the addition of several health effects to the SEM. The Department can, and does, make these kinds of updates on its own, as well.

Board Discussion:

Chair Markowitz opened the Board discussion period by reviewing the charge of the Board and some of its recent recommendations for the new members. The Board has been tasked with providing input on updates to the SEM, providing recommendations on the medical guidance for the claims examination process, reviewing evidentiary evidence for Part B lung diseases (i.e., chronic beryllium disease and chronic silicosis), reviewing the work of the Department's IHs and CMCs, and "such other matters as the Secretary considers appropriate."

Chair Markowitz then discussed the Board's most recent recommendations. One was to recommend that the Department encourage Congress to amend the statute to make three borderline beryllium lymphocyte proliferation test (BeLPT) results equivalent to an abnormal result for purposes of determining beryllium sensitivity. There are encouraging signs that Congress may make these changes in the coming National Defense Authorization Act omnibus. Ms. Splett added that Senator Patty Murray from Washington has also introduced a separate Beryllium Testing Fairness Act that would make the recommended changes, as well. Another Board recommendation was that IH assessments should include language that there is "no evidence that the claimant's exposure exceeded regulatory standards" only when there is affirmative evidence in support of such a statement. The Department ultimately agreed with this recommendation.

Chair Markowitz then described the Board's past efforts reviewing Department quality assurance (QA) procedures and

findings. One topic that arose from that project was the lack of comprehensive QA review of the accuracy of CMC opinions.

Chair Markowitz raised the topic of job categories that work throughout a specific site, rather than just a few locations, and how to account for their potential exposures, particularly when there are wide variations in the SEM for these categories from site to site. Examples of this job category could include firefighters or security quards. Documentation is often lacking for these job categories, which makes it difficult for the SEM to reflect the true scope of possible exposures. The Board discussed possible language that could direct the IHs to consider this expanded exposure potential for these unique job categories. Mr. Vance acknowledged that one of the major challenges for the program is the absence of hard evidence for claims, and something it strives to mitigate to the extent possible. Mr. Key talked about his efforts to petition Congress for the law that eventually became EEOICPA, and his belief that the federal government is in possession of classified material that could shed more light on exposures at AWE sites. Chair Markowitz noted that the sheer volume of even unclassified material limits the ability of the Board to conduct thorough reviews on its own. Ms. Zaback said that NIOSH's activity to gather data and perform dose reconstructions in support of the Radiation Board seems like a more constant and thorough process than what is done by DEEOIC and its contractor. Ms. Pond said DEEOIC and its contractor are always doing research, but admitted that it has more limited staff and resources than NIOSH does, which likely accounts for the difference Ms. Zaback described. Chair Markowitz said this was a topic that the Board can deliberate on further later in the meeting.

After a short break, Chair Markowitz reviewed another series of Board recommendations relating to asbestos and expanding the list of job titles presumed to have asbestos exposure. Chair Markowitz described the history of the Board's efforts on this topic and how it identified certain job titles that were not covered by DOL. The Department accepted most of the recommendations but there is an ongoing back and forth between the Board, DOL, and Paragon over whether a few particular job classes should be included, namely chemical, mechanical, and industrial safety engineers. As a way of potentially settling the question, Chair Markowitz posited the idea of a search of accepted EEOICPA claims for mesothelioma or asbestosis claims and/or by the aforementioned job titles to see if there is a significant correlation. Mr. Vance said DEEOIC's claims adjudication database is not searchable by job title, although

that information does exist in the claim file itself. They can search by accepted condition, but Mr. Vance cautioned that mesothelioma is a small population with a very high acceptance rate regardless of job class, so the conclusions that could be drawn might be limited. Mark Catlin suggested that the Board recommend that DOL consider making its claims database searchable by job title. Board members raised the idea of expanding the search to claims related to pleural scarring caused by asbestos, which would be a larger sample size than mesothelioma or asbestosis.

Chair Markowitz then presented program data on the most common accepted conditions, the number of claims, and acceptance rates. The top two accepted conditions are skin cancer and COPD. The acceptance rate for most of the top 20 conditions is above 50%, with a range of all conditions 8% to 83%. By far the most common reason for denial is negative causation. Chair Markowitz also presented data on the top 10 cancers and top 10 respiratory conditions. Dr. Friedman-Jimenez raised a longstanding concern of his that the statute does not recognize COPD caused by exposure to vapors, gases, dusts, and fumes (VGDF) because they are a mix of substances rather than one identifiable substance. Dr. Friedman-Jimenez believes VGDF causation is well-established in the scientific literature. Chairman Markowitz acknowledged this stalemate between the Board and the Department, and suggested this could be an area where Congress would have to amend the statute. Dr. Cloeren said it would be helpful if claims data could be broken down by consequential or secondary conditions versus primary condition. Chairman Markowitz pointed out that the accepted rates (percentages) in the Excel sheet were erroneous because the denominators included claims that are still pending. Dr. Bowman said a next step for the Board might be to dig deeper into conditions that are being accepted at a lower rate than might be expected.

Public Comment Period:

The first public commenter was Sandra Thornton. Ms. Thornton discussed the difficulties her brother-in-law has had getting his claims processed and approved, and errors made by the Paducah Resource Center that delayed the process. They have submitted 25 claims, and only two have been approved. The others are in various stages of appeal. Ms. Thornton discussed how the Paducah site kept notoriously poor records but that it was Congress' intent that the Department find a way to cover these workers. She believes DEEOIC is not living up to its duty as set out by Congress.

Donna Hand delivered comments about the BeLPT test and problems that she sees with how DEEOIC handles beryllium-related claims, which she believes is far too restrictive. She also emphasized that the statute does not specify specific levels or specific toxins, and she believes DEEOIC's practice is in conflict with this fact. Ms. Hand pointed out that workers of certain classifications also performed other work outside their duties at certain points, and this is not accounted for by the program. She also argued that DEEOIC should consider all cancers that are recognized by the National Cancer Institute, not only the statutory specified cancer list.

D'Lanie Blaze, CORE Advocacy, commented on how the Department's shift away from keeping claims organized geographically by District Office has degraded the value of the institutional knowledge for the claims adjudication process that existed prior to the 2018 change. Ms. Blaze believes the new system increases the likelihood of errors and the site familiarity needed to maximize the usefulness of the SEM. Even if erroneous claims are corrected by the Final Adjudications Branch, this will have resulted in a costly delay. She also expressed concern about exposure data being removed from the SEM, which she believes should only occur when there is overwhelming evidence in support of doing so.

Stephanie Carroll, an authorized representative specializing in chronic beryllium disease claims, expressed the opinion that borderline BeLPT results should be considered as abnormal under the statute. She said the concept of a borderline result did not exist prior to the Act, and that one high stimulating index result should be considered abnormal. Ms. Carroll also expressed disapproval of toxins or exposures being removed from the SEM because it can create perceived unfairness among the claimant community. For example, individuals who filed claims earlier and received compensation based on something that was later removed from the SEM and now claimants applying for the same substance or exposure would be denied. Ms. Carroll suggested that the Board review any documents used to remove toxic substances from the SEM.

THRUSDAY, DECEMBER 1, 2022

Call to Order:

Mr. Jansen called the second day of the meeting to order at 8:28 a.m. and reviewed the meeting agenda and logistics. Chair

Markowitz led the Board and attendees in a round of introductions.

Department of Energy (DOE) Update:

Greg Lewis, Director, DOE Office of Worker Screening and Compensation Support, delivered the presentation. Mr. Lewis' office has two overarching functions: funding and supporting DOE's role in the EEOICP, and funding and supporting the Former Worker Medical Screening Program (FWP). Under the EEOICP umbrella, the office's role is primarily to respond to requests for information from NIOSH and DOL regarding individual claims. It also provides assistance to DOL and NIOSH on large-scale research and site characterization projects, such as SECs or the SEM, as well as research to determine site coverage.

DOE's site points-of-contact (POCs) play an important role in the claims process. They manage their site's response to records requests, coordinate research activities, interviews with current and former workers, and provide EEOICPA information to workers, among other activities. Mr. Lewis provided further detail on the claims request process, the bulk of which will be employment verification. As the claim process advances, DOL will also submit Document Acquisition Requests (DARs) for information on the employee's work history and known exposures. DOE also responds to NIOSH requests for radiological monitoring and dose data.

He also provided a brief history of the search for records and how it has expanded and modernized over the years, including the development of the Secure Electronics Records Transfer system, or SERT. This system is a secure, online system that all DOE facilities have access to, through which data requests can be entered and processed electronically. Mr. Lewis walked through an example of how a claim request might be processed by a DOE POC, noting that the complexity can vary depending on the nature of the employee's work history. Dr. Bowman asked if DOE sends general work site exposure data in cases where specific records for the claimant cannot be found. Mr. Lewis said they normally do not, except in cases of construction subcontractors where data-keeping practices were less fulsome.

Mr. Lewis noted that DOE responds to approximately 14,000 records requests per year, from over 25 DOE facilities. For FY22, DOE had an 85% on-time response rate, which was a notable decrease from the pre-pandemic 98% rate. Mr. Lewis attributed the delay to pandemic-related site closures and changes to PII

redaction practices. DOE hopes to get back above 90% next year.

Mr. Lewis also discussed his office's role supporting the creation of the SEM and continued research. Mr. Lewis discussed with Dr. Bowman how the security classification process affects the public-facing version of the SEM and whether exposure data is ever removed or classified. Mr. Lewis said he is only aware of language being changed to be slightly less specific when describing locations, but emphasized that the presence of a toxic substance at a site is never classified.

Mr. Lewis then provided a brief overview of DOE's involvement in EEOICPA and FWP worker outreach. Under the FWP, which covers all former workers at DOE sites, Mr. Lewis' office is responsible for identifying and notifying former workers at risk for occupational disease, offering medical screening, and providing information and assistance about medical follow-up and compensation. Dr. Cloeren asked if any worker can access a copy of their DAR. Mr. Lewis said workers can receive a copy through a formal claims process, a FOIA request, or by requesting it directly from DOE.

Board Discussion (Continued):

Chair Markowitz began the Board discussion session by noting the passing of Terrie Barrie of the Alliance of Nuclear Worker Advocacy Groups (ANWAG). Ms. Barrie was a long-time claimant advocate and regular attendee at Advisory Board meetings. Chair Markowitz said her input and critiques were of great assistance to efforts to improve the program, and her presence will be missed.

Chair Markowitz reviewed the discussion topics that arose during the first day of the meeting. The Board first took up the issue of whether chemical engineers should be presumptively regarded as having significant exposure to asbestos prior to 1995. Board members discussed if they could identify a set of claims data to review that might provide data to support this proposal. DOL and Board members had concerns about the amount of work such a project might entail and whether it would produce enough data to be worthwhile. Acknowledging the possibility of small data sets, Chair Markowitz suggested reviewing denied mesothelioma claims over the past several years. Dr. Cloeren said they might miss trends if they only look at denied claims. Chair Markowitz said that would greatly increase the amount of work. Dr. Cloeren said they could start by just asking for the numbers of denied and accepted mesothelioma claims. Member Bowman said the Board was

only interested in claims denied for negative causation. Chair Markowitz formally moved that the Board request yearly data, for the past five years, on mesothelioma claims denied for negative causation. Dr. Friedman-Jimenez expressed his opinion that based on the top 10 claims data provided earlier by DOL, the number of mesothelioma claims would likely be too small to provide meaningful data. He noted that presumptions are just one part of the larger claims process, and engineers can still be considered for asbestos-related claims on a case-by-case basis.

The Board next discussed the issue of site-wide job titles, such as security guards, firefighters, et cetera, that may have their exposures under-calculated in the SEM. The Department has rejected recommendations on this topic in the past, but Chair Markowitz proposed a reframed recommendation that might be more acceptable. The suggestion would be for DOL to direct that claims from this limited number of job titles would be sent to the industrial hygienist to consider a broader set of exposures at the site where that claimant worked. The Board debated whether to specify which job titles fit this category in its recommendation or to leave it undefined. One concern raised by Board members was that the sites often had different names for these types of job classes. Member Zaback suggested DOL could reach out to the sites to find out what names they used in order to develop a master list of site-wide job titles.

Chair Markowitz shifted the discussion to the topic of the Board's ability to review DOL policy changes in a timely manner, that is, prior to issuance of policy changes. Given the complexity of the process and the desire to not cause delays to policy updates, the Board agreed to not make a recommendation at this time.

The next topic was whether the Board wants to request more information from DOL on how information in the SEM gets removed. One concern raised by Board members was the lack of transparency on why information has been changed or removed, particularly when it might affect a large number of potential claimants. Chair Markowitz asked Mr. Vance if Paragon keeps a log of the changes it makes to the SEM. Mr. Vance said he believes they do. He reiterated that Paragon has qualified researchers who are making these changes based on the best available evidence. He believed Paragon would be happy to provide the Board information on how and why certain changes were made, should the Board request. Dr. Bowman suggested that SEM updates should be disseminated in a similar manner as Procedure Manual updates. Mr. Key agreed, and added his opinion that historical language

should remain in the SEM, rather than being removed entirely. Dr. Van Dyke said he would like to have a Paragon representative attend a Board meeting to answer questions from the Board. Other Board members agreed, and suggested regular attendance at Board meetings by Paragon staff would be beneficial. Member Splett said she would like to see Paragon explain their process using specific examples. Chair Markowitz added that he would like for Paragon to provide information on its internal work processes regarding the SEM.

Chair Markowitz asked for volunteers from the Board to work on drafting proposed language regarding the topics for recommendations or information requests that have been discussed at the meeting, to be voted on or issued at a later date.

Member Bowman raised the topic of the SEM's lack of temporal information, suggesting this was a source of confusion when changes are made. Board members noted that incorporating temporal data into the SEM would be a massive undertaking. Mr. Vance explained how, to help account for temporal factors, IHs rely on their general knowledge of the chronology of atomic weapons production across the DOE complex, among other factors, and the data provided in the SEM.

The Board next discussed changes to the Procedure Manual's instructions for IHs on how to characterize exposure. These changes came about following the Board's recommendation to remove language about regulatory exposure levels. The new language includes a new level of exposure in addition to the existing significant-low, significant-moderate, significanthigh, and incidental exposures. The new tier is "more than incidental, but not significant." This category includes exposures where there is no indication of a violation of exposure levels or an incident, there is no substantive evidence of significant exposure in the records, and/or there is documented use of PPE. Member Van Dyke expressed his opinion that this new category was just as vague as the language it was meant to replace. Dr. Cloeren worried that the new category would serve as a catch-all for exposures that lack documentation, including some that might otherwise be determined to be significant. Mr. Vance said this language was designed to account for the gray area where exposures are claimed in the later years of the DOE complex where stringent protective practices and record-keeping were in place, but the documentation to support the exposure is lacking. Chair Markowitz asked how the word 'significant' became attached to exposure levels, given that that is not how the language is

phrased in the statute in his reading. Mr. Vance said DOL needed to develop an exposure classification system at the outset, and this language is commonly used in IH processes. DOL then used this system to build out the presumptions. He noted that one reason that the new tier is not phrased as 'significant-very low' is because any significant exposure automatically triggers a presumption. Chair Markowitz opined that it might be more accurate to combine the new tier and incidental exposure tier into one 'unlikely or no exposure' tier. Mr. Vance pointed out that the purpose of the language is to provide an accurate description to the physicians, who then make their own professional judgment. Dr. Friedman-Jimenez said that the word 'significant' has become a topic of controversy in the scientific literature, particularly in statistical contexts, and said he thinks DOL needs to define the word for its purposes. This might be an area that the Board can provide input on. Mr. Vance said the bulletin made an attempt to define what the word means in this context, but DOL would be open to the Board's assistance in refining the definition. Board members agreed to form a working group to draft a proposed recommendation on the topics of the new exposure tier and the definition of 'significant.'

Chair Markowitz then discussed the next steps for the Board case reviews. Dr. Cloeren asked whether DOL could set up a web-based share site to assist the Board in this effort, rather than the current method of using CDs. Chair Markowitz proposed establishing a work group to delineate the goals of the case review effort in anticipation of the Board receiving contract support staff to begin the project in earnest.

Regarding the site-wide job titles topic, Dr. Bowman made a motion that the Board recommend that "the Department provide instruction to CE, IH, and CMC reviewers that if there is evidence that a claimant's employment led to their routine duties being conducted widely across a site, that this be specifically noted in the claim file and that consideration be given in establishing toxic substance exposure and causation for exposures that are site-wide and not just limited to their work area or record." The Board voted unanimously to approve the motion.

Review of Public Comments:

Chair Markowitz pointed the Board to written comments submitted by Elizabeth Brooks regarding a change in the Procedure Manual that limited Part B compensation eligibility for Nevada uranium mining workers to the period prior to 1992. Chair Markowitz noted that the statute does not provide a cut-off date for these workers, although it does in some other instances. He felt that the Board should issue an information request to DOL for an explanation for this change.

Board Work Plan:

Before the meeting adjourned, Chair Markowitz noted several items that the Board would continue to discuss at future meetings. These include the SEM limiting the number of potential substances to seven, how the SEM keeps exposure links up-to-date, and Board member term lengths.

Close of Meeting:

Mr. Jansen adjourned the meeting at 11:01 a.m.

Steven Markowitz, MD, DrPh

Chair, Advisory Board on Toxic Substances and Worker Health

Date: 3/8/2023