

Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Advisory Board on Radiation and Worker Health (ABRWH)
159th Meeting Minutes

Wednesday, August 7 – Thursday, August 8, 2024

Wednesday August 7

Summary Proceedings

The Advisory Board on Radiation and Worker Health meeting convened at 11:00 a.m. Eastern Daylight Time (EDT), Dr. Henry A. Anderson, Chair, presiding.

Attendees

Members

Henry A. Anderson, Chair
Josie Beach, Member
Clawson, Brad Member
Frank, Arthur, Member
Kotelchuck, David, Member
Lockey, James, Member
Martinez, Nicole, Member
Pompa, David, Member
Ziemer, Paul, Member

Non-Members, Registered and/or Public Comment Participants:

Roberts, Rashaun, DFO
Adams, Nancy, NIOSH contractor
Barton, Bob, SC&A
Behling, Kathy, SC&A
Brackett, Elizabeth, ORAU Team
Buchanan, Ron, SC&A
Calhoun, Grady, DCAS
Cardarelli, John, DCAS
Cook, Madeline, DCAS
Dietz, Kristen, DOL
Fitzgerald, Joe, SC&A

Gogliotti, Rose, SC&A
Guido, Joe, ORAU Team
Hawkinson, John
Hoff, Jenny, ORAU Team
Holzberger, Marie, HHS
Hughes, Lara, DCAS
Kranbuhl, Alek, DCAS
Lewis, Greg, DOE
Lobaugh, Megan, DCAS
Lovell-Pamperin, Sarah
Mangel, Amy, SC&A
Marion-Moss, Lori, DCAS
McCloskey, Pat, ORAU Team
Ostrow, Steve, SC&A
Palau, Angie
Rafky, Michael, HHS
Ryan, Judith
Sharfi, Mutty, ORAU Team
Smith, Matthew, ORAU Team
Taulbee, Tim, DCAS
Tribbett, Zachariah
Vance, John, DOL
Vanoli, Kevin
Zach, J.

Registered Members of the Public:

DeGarmo, Denise
Hand, Donna

Roll Call/Welcome - Dr. Rashaun Roberts, DFO

Dr. Rashaun Roberts called to order the Advisory Board on Radiation and Worker Health at 11:00 am EDT on August 7, 2024. A roll call of all ABRWH members confirmed that a quorum was present. The quorum was maintained throughout the meeting. Attendees declared conflicts of interest during roll call. Dr. Roberts turned the meeting over to Dr. Anderson, Board Chair, who welcomed all attendees.

Program Updates: NIOSH, DOL, and DOE

Grady Calhoun (NIOSH), Kristin Dietz (DOL), and Greg Lewis (DOE) gave updates of each organization's activities for the EEOICPA Program and responded to questions from Board Members. All three organizations noted an increase in claim activity from last year.

SC&A Review of ORAUT-RPRT-0097 for Breathing Zone to General Area Air Concentration Ratios in Small Workrooms – Ms. Josie Beach, Chair Subcommittee on Procedures Review (SPR), Mr. Bob Barton, SC&A

After introductory remarks Ms. Beach called on Mr. Bob Barton, SC&A to discuss the SC&A's review of ORAUT-RPRT-0097. This presentation had previously been discussed at a meeting of the Subcommittee for Procedures Reviews. The topic is particularly germane because the SEC Evaluation Report for Idaho National Lab (INL)/Argonne National Lab -West (ANL-W) proposes using general air sampling data to assess workers' internal exposures in some instances.

Report-0097 provides a summary of several studies performed at different facilities where workers wore breathing zone (BZ) air samplers in rooms that contained general air (GA) samplers. The studies then compared the BZ results to the GA results and evaluated factors that affected the ratio between the two types of samples. They found that the ratio between GA and BZ results varied considerably, depending on work factors and the structure of the room. Report-0097 provides several potential ratios to use in dose reconstruction, depending on the work scenario that was encountered. SC&A's review found Report-0097 to be satisfactorily done but observed that dose reconstructors might not have sufficient information about specific work tasks to reliably select from among the possible ratios. They cautioned that dose reconstructors should choose conservative (high) ratios when information was incomplete. Also, these studies were all done in relatively small rooms, so the work rooms where this method is used for dose reconstruction must also be relatively small.

Idaho National Laboratory (INL)/Argonne National Laboratory-West (ANL-W) Update and Use General Area Air Sampling for Internal Dose Assessment – Dr. Henry Anderson, Interim Chair, INL/ANL-W Workgroup, Dr. Megan Lobaugh, NIOSH/DCAS

After introductory remarks Dr. Anderson called on Dr. Megan Lobaugh, DCAS, to discuss the work DCAS had done in response to a portion of SC&A's review of INL/ANL-W Evaluation Report. Specifically, this was SC&A's review of the use of general area air sampling to reconstruct internal doses. Dr. Lobaugh discussed the areas of ANL-W where internal exposures were to actinides only, and described the air monitoring data that was available for those areas. She also described how DCAS had selected a ratio from Report 97 to calculate breathing zone concentrations (and thus intakes) from the general area data that was available.

Additional discussion of this topic and other issues from SC&A's review of the SEC Evaluation Report will be discussed at INL/ANL-W Work Group meetings.

SEC Petition Status Update – Dr. Megan Lobaugh, NIOSH/DCAS

Dr. Lobaugh reported that SEC Petition 264 for the Missouri University Research Reactor is currently in the qualification process. That facility is not currently on an EEOICPA-covered facility, so as a first step in qualification, DCAS has sent letters to

DOE and DOL asking if it should be added. DCAS is continuing to prepare an addendum to the evaluation report (ER) for petition SEC-0221 for Lawrence Livermore National Lab (LLNL) for the years 1990 to 1995. A draft ER has been prepared and is being reviewed. The respective work groups, DCAS and SC&A are continuing work on SEC petitions from Hanford, Savannah River, Los Alamos National Lab, Idaho National Lab, Argonne National Lab-West, Area IV Santa Susanna, DeSoto Avenue Facility, the Y-12 Plant, and the Pinellas Plant. DCAS continues to evaluate records for West Valley Demonstration Project to decide if an 83.14 petition is warranted for the years 1966-1968.

Subcommittee for Dose Reconstruction Reviews (SDRR) Update – Dr. David Kotelchuck, Chair

Dr. Kotelchuck reported on the Subcommittee’s June 4, 2024, meeting. Because of COVID and Cybersecurity Upgrade initiative, that was their first meeting since April 2022. This will be his last Subcommittee update because of his impending retirement. At that meeting the Subcommittee discussed Set 31 dose reconstructions reviews. Additionally, they learned that the Board Review System is available again through an application called CyberArk. Rose Gogliotti, SC&A, will provide training to Board Members on CyberArk.

Set 32 dose reconstruction reviews have been completed. DCAS is working to respond to the findings and observations from those reviews. SC&A has completed initial reviews of Set 33, but no further action has occurred on those yet.

The Subcommittee has recognized that dose reconstruction reviews have involved a smaller percentage of female claimants than the percentage of female claimants in the entire claimant population. The Subcommittee is trying to remedy this by selecting over 20% female claimants in future sets. Dr. Kotelchuck showed a graph showing how the percentage of female claimants in the total claimant population changed over time. While the overall percentage of female claimants is 14.8%, the percentage was less than 11% for claims filed in 2000-2002, and generally increased to almost 17% for claims submitted from February 2022 to July 2024. Interestingly, the percentage of female claims for the period November 4, 2015, to February 2022 was 26.6% before dropping back to 16.8% for February 2022 to July 2024. It’s not clear if the 26.6% was unsustainably high, or if the subsequent drop was an anomaly. Either way, the Subcommittee intends to increase the reviews for female claimants in order to align the reviewed percentage with the total population percentage.

Procedures Review Finalization/Document Approvals – Ms. Josie Beach, Chair, Ms. Kathy Behling, SC&A

After introductory remarks Ms. Beach called on Ms. Kathy Behling, SC&A to discuss the Subcommittee’s completed review of eight documents. Ms. Behling then described the Subcommittee’s completed review of the following documents.

- ORAUT-PROC-0044, rev. 00, “Special Exposure Cohort (SEC)”

- OCAS-PER-001, rev. 0, “Misinterpreted Dosimetry Records Resulting in an Underestimate of Missed Dose in SRS Dose Reconstructions”
- OCAS-TIB-006, rev. 1, “Interpretation of External Dosimetry Records at the Savannah River Site (SRS)”
- OCAS-TIB-007, rev. 0, “Neutron Exposures at the Savannah River Site”
- OCAS-TIB-008, rev. 0, “Use of ICRP 66 to Calculate Respiratory Tract Doses”
- ORAUT-OTIB-0008, rev. 00, “Technical Information Bulletin for a Standard Complex-Wide Conversion/Correction Factor for Overestimating External Doses Measured with Thermoluminescent Dosimeter”
- ORAUT-OTIB-0028, rev. 01, “Validation of Thorium Annual Dose Conversion Factors”
- ORAUT-OTIB-0079, rev. 01, “Guidance on Assigning Occupational X-Ray Dose Under EEOICPA for X-Rays Administered Off Site”

After Ms. Behling presented the Subcommittee’s work on each document, the Board voted to close the reviews of all eight documents.

Board Work Session/Board Correspondence

Dr. Anderson read the Board’s letter to the Secretary HHS, recommending the addition of an SEC class for Metals & Controls. The letter he read into the record at the Board’s last meeting was not the latest version of the letter. Board members asked questions about recent technical documents that were published for Savannah River Site, and Oak Ridge Gaseous Diffusion Plant. Following that, Dr. Roberts described public comments and responses from the April Board meeting.

The Board scheduled a teleconference for June 18, 2025, and a full Board meeting for August 26 & 27, 2025.

Public Comment

Dr. Roberts read a letter from Dr. Denise DeGarmo, petitioner representative for the Pinellas SEC petition, thanking the Board for allowing her to make a research presentation to the Board tomorrow.

Meeting Adjourned

After a motion to adjourn, Dr. Anderson adjourned the meeting for the day at 5:30 pm.

Thursday August 8

Summary Proceedings

The Advisory Board on Radiation and Worker Health meeting convened at 11:00 a.m. Eastern Daylight Time (EDT), Dr. Henry A. Anderson, Chair, presiding.

Attendees

Members

Anderson, Henry A., Chair
Beach, Josie, Member
Clawson, Brad, Member
Frank, Arthur, Member
Kotelchuck, David, Member
Lockey, James, Member
Martinez, Nicole, Member
Pompa, David, Member
Ziemer, Paul, Member

Non-Members, Registered and/or Public Comment Participants:

Roberts, Rashaun, DFO
Adams, Nancy, NIOSH contractor
Barton, Bob, SC&A
Behling, Kathy, SC&A
Buchanan, Ron, SC&A
Calhoun, Grady, DCAS
Cardarelli, John, DCAS
Cook, Madeline, DCAS
Gleckler, Brian, ORAU Team
Fitzgerald, Joe, SC&A
Hawkinson, John
Holzberger, Malie, HHS
Hughes, Lara, DCAS
Mangel, Amy, SC&A
Marion-Moss, Lori, DCAS
McCloskey, Pat, ORAU Team
Newkirk, Shawnda
Nguyen, Nhung
Ostrow, Steve, SC&A
Palau, Angie
Powell, Susan
Rafky, Michael, HHS
Sharfi, Mutty, ORAU Team
Smith, Matthew, ORAU Team

Taulbee, Tim, DCAS
Tribbett, Zachariah
Ushino, Tosh

Registered Members of the Public:

DeGarmo, Denise

Roll Call/Welcome - Dr. Rashaun Roberts, DFO

Dr. Rashaun Roberts called to order the Advisory Board on Radiation and Worker Health at 11:00 am EDT on August 8, 2024. A roll call of all ABRWH members confirmed that a quorum was present. The quorum was maintained throughout the meeting. Attendees declared conflicts of interest during roll call. Dr. Roberts turned the meeting over to Dr. Anderson.

SEC-256 Pinellas Plant, Clearwater, FL; (Aug 1, 1957 – Dec 31, 1997) – Mr. Brad Clawson, Workgroup Chair, Ms. Maddie Cook, DCAS, Dr. Steve Ostrow, SC&A, Petitioner

Ms. Maddie Cook, DCAS, presented a summary of Pinellas operations, radiation sources, and the technical basis documents that DCAS has prepared to guide dose reconstructions. Dr. Steve Ostrow presented a summary of the discussions that have occurred so far about Petition-256, SC&A's current efforts to analyze information received from the petitioner and from other sources, and their efforts to compile a comments matrix that contains comments they developed from their review of the Evaluation Report, and comments received from claimants and the petitioner. SC&A will prepare another review to supplement their Interim Review Report, which was published in June 2023.

Dr. Denise DeGarmo, Pinellas petitioner representative, described how DOE facilities were operated by contractors, with some level of oversight by DOE. In the case of Pinellas, GE Nuclear Devices was the contractor. Contracts for operation often emphasized production more than safety and health measures. In her view, Pinellas conducted much more research, development, and testing of nuclear components than is generally recognized. While Pinellas is regarded as being under DOE Albuquerque Operations Office, GE Nuclear Devices also had contracts with several other entities, within and outside DOE. Dr. DeGarmo described some of the items that Pinellas produced, the activities that were involved in their manufacture, and some of the problems encountered. She also questioned the accuracy of DCAS's current understanding of when and where various radioactive materials were used at Pinellas. She talked extensively about the use of plutonium at the site, monitoring results, and the Tiger Teams criticisms of Pinellas radiological protection.

Dr. DeGarmo read from several former worker interviews to question DCAS's treatment of exposures associated with tritium, Krypton-85, thorium, neutron generator dismantlement, calibration of radiation monitoring instruments, and storage of

radioactive waste. She intends to share the documents she has collected with the Advisory Board.

Meeting Adjourned

Before ending the meeting Dr. Anderson read a tribute to Board member Dr. David Kotelchuck, who will retire after this meeting. Board members and staff members from DCAS and SC&A added words of appreciation, and Dr. Roberts read a letter of thanks from Dr. John Howard, NIOSH Director to Dr. Kotelchuck. After a motion to adjourn, Dr. Anderson adjourned the meeting at 3:00 pm EDT.