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

November 16, 2023

Summary Proceedings

The Subcommittee for Procedures Review meeting convened via teleconference at 11:00 a.m. Eastern Standard Time (EST), Ms. Josie Beach, Chair, presiding.

Attendees

Members

Josie Beach, Chair Victoria Cassano, Member Loretta Valerio, Member Paul Ziemer, Member

Non-Members

Rashaun Roberts, Designated Federal Official Nancy Adams, NIOSH contractor Barton, Bob, SC&A Behling, Kathy, SC&A Buchanan, Ron, SC&A Calhoun, Grady, DCAS Farver, Doug, SC&A Gogliotti, Rose, SC&A Harrison, David Mangel, Amy, SC&A Marion-Moss, Lori, DCAS Rafke, Michael, HHS Rutherford, LaVon, DCAS Sharfi, Mutty, ORAU Smith, Matthew, ORAUT Taulbee, Tim, DCAS

Roll Call/Welcome - Dr. Rashaun Roberts, DFO

Dr. Rashaun Roberts called to order the Subcommittee for Procedures Review at 11:00 a.m. EST on November 16, 2023, via teleconference. A roll call of all Subcommittee members confirmed that a quorum was present. The quorum was maintained throughout the meeting. Subcommittee members, federal staff, and contractors announced conflicts of interest during roll call. Dr. Roberts turned the meeting over to Ms. Beach, Subcommittee chair.

Carry Over Items from June 21, 2023, SPR Meeting

SC&A's Follow-up Review of PER-049 (Paducah Gaseous Diffusion Plant)

Dr. Ron Buchanan, SC&A, presented the results of SC&A's most recent work on PER-049. This work involved further review of a claim that had been part of Subtask 4 of SC&A's review of PER-049. When SC&A reviewed the claim, which DCAS had reevaluated as part of PER-049, they saw that the internal dose in the re-evaluated dose reconstruction was higher than it had been in the original dose reconstruction. This seemed surprising since the original dose reconstruction was performed using hypothetical intakes as an expedient intentional over-estimate, while the re-evaluated dose reconstruction used the Energy Employee's (EE's) actual bioassay data. A question arose as to whether the hypothetical intake could be considered and overestimate in every case. Presumably using the EE's actual data would result in a lower dose than a hypothetical intentional overestimate.

After SC&A's original review of this case, DCAS/ORAUT determined that the PER reevaluation of this case had used overestimating intake assumptions for reasons of expedience. The presumed intakes in the PER re-evaluation would have resulted in far higher bioassay results than were in the EE's record. Consequently, DCAS/ORAUT reevaluated the case again, using intake assumptions that would result in bioassay results that would approximately match the EE's bioassay record. This second re-evaluation resulted in internal doses that were lower than either of the first two. SC&A agreed with this second re-evaluation and concluded that the hypothetical intake used in the original dose reconstruction could safely be considered an overestimating approach. SC&A recommended that this review be closed, and the Subcommittee agreed to recommend to the Board that the review of this PER be closed.

SC&A's Peek Street Memo on the Review of Two Additional Cases

SC&A's review of the Peek Street Dose Reconstruction Template had resulted in eight findings and three observations. The Subcommittee placed five of the findings and two of the observations in abeyance at its September 2022 meeting. This means DCAS has committed to changes to resolve them. At that meeting the Subcommittee also tasked SC&A to review two cases to address the remaining three findings and one observation. Doug Farver, SC&A, presented the results of SC&A's recent review of the two cases. The review resulted in four findings related to calculations of missed doses and internal doses. DCAS had only recently received this report and will provide a response in the

future. The Subcommittee kept this review open added this item to its carry-over items for the next meeting.

Newly Issued SC&A Reviews

DCAS-PER-040, "Mallinckrodt TBD Revisions"

DCAS prepared PER-040 to address changes that were incorporated in Rev. 3 of the Mallinckrodt Site Profile. Kathy Behling, SC&A, presented the results of Subtasks 1 through 3 of SC&A's review of this PER. The review resulted in no findings and two observations. One observations points out an apparent typographical error in Rev. 3 of the Site Profile, while the other questions the reasoning for instructions concerning non-penetrating dose calculations at the St. Louis Airport Storage site (SLAPS). Ms. Behling also proposed criteria for selecting cases for SC&A's review under Subtask 4 of this review, which the Subcommittee accepted. During its discussion the Subcommittee noted inconsistent dates for the start of covered activities at SLAPS, so that became a third observation for DCAS to address. The Subcommittee added this item to its carryover items for the next meeting.

DCAS-PER-051, "Weldon Spring Plant"

DCAS prepared PER-051 to address revisions to the Weldon Spring Site Profile that were made in 2013. In February 2023 the Subcommittee tasked SC&A to review this PER. Dr. Ron Buchanan, SC&A, presented the results of Subtasks 1 through 3 of SC&A's review. Their review resulted in zero findings and two observations. One observation described incorrect language in the PER that did not affect the reevaluations of dose reconstructions that DCAS performed for the PER. The other observation questioned whether some cases that were not re-evaluated, should have been. After explanations by DCAS and ORAUT, the Subcommittee was satisfied that all appropriate case were re-evaluated under the PER. Consequently, the Subcommittee closed both findings. Dr. Buchanan also suggested criteria that should be used to select claims for SC&A to review under Subtask 4, which the Subcommittee accepted.

DCAS-PER-083, "Weldon Spring TBD Revisions"

DCAS prepared PER-083 to address revisions to the Weldon Spring Site Profile that were made in 2017. In February 2023 the Subcommittee tasked SC&A to review this PER. Dr. Ron Buchanan presented the results of Subtasks 1 through 3 of SC&A's review of DCAS-PER-0083. Their review did not develop any findings or observations. Dr. Buchanan also suggested criteria that should be used to select claims for SC&A to review under Subtask 4, which the Subcommittee accepted.

DCAS-PER-067, "Allegheny Ludlum Appendix Q Revisions"

DCAS prepared PER-067 to address revisions to Appendix Q of TBD-6000. That is the technical document that describes dose reconstruction techniques for Allegheny Ludlum. Amy Mangel, SC&A, presented the results of Subtasks 1 through 3 of SC&A's

review of PER-067. Their review developed zero findings and four observations. One observation related to an apparent typo concerning the end date of AWE operations at Allegheny Ludlum, and another pointed out a discrepancy in the number of ingots that were rolled at the facility. Dose reconstructions are based on airborne concentrations rather than ingot throughput, so the Subcommittee closed the second observation. The other two observations do relate to how dose reconstructions are performed. One pointed out that Appendix Q uses different workday durations for the airborne exposure pathway and the ingestion exposure pathway. It would seem that the same workday duration would apply to both. The final observation noted that DCAS had used a different approach to estimating airborne concentrations at Allegheny Ludlum than it had at Bliss and Laughlin, another AWE that also performed uranium rolling. DCAS will provide written responses to observations at a later date. Ms. Mangel also suggested criteria that should be used to select claims for SC&A's review under Subtask 4, which the Subcommittee accepted.

ORAUT Report-0097, "Breathing Zone to General Area Air Concentration Ratios in Small Work Rooms"

Kathy Behling, SC&A, presented the results of SC&A's review of Report-0097. Their review developed zero findings and two observations. Report-0097 says that a certain amount information must be available about work sites in order to use the ratios in the Report, and in order to know which values from the Report to use. SC&A's first observation was that individual dose reconstructors might not have access to the type of work site information needed to select Report-0097 values. The second observation was that dose reconstructors should be instructed to include in dose reconstruction reports their reasoning for selecting Report-0097 values.

In response to these findings DCAS stated that guidance on using Report-0097 values would probably be written into various sites' technical documents such as Site Profiles. Individual dose reconstructors will rely on those documents, rather than finding the needed worksite information themselves. Additionally, DCAS reported that it and ORAUT are currently incorporating Report-0097 guidance into the Site Profile for Argonne National Lab – West. Reviewing that document when it is available should provide sufficient response to these observations. On the basis of this discussion, the Subcommittee decided to close the two observations, with the understanding that the questions would be revisited when the Subcommittee reviews the upcoming revision of the Argonne National Lab – West Site Profile.

Preparation for December 2023 Full ABRWH Meeting: Review of SPR Accomplishments and Current Activities

Kathy Behling, SC&A, shared a presentation showing the various type of technical documents the Program uses, the number of each type of document, and the number of those documents that the Subcommittee has reviewed. Subcommittee Chair Josie Beach will present this to the full Board at its December 2023 meeting. The presentation also describes how SC&A is tracking these discussions in preparation for loading into the successor application to the Board Tracking System, which was disabled by the

Cybersecurity Upgrade Initiative. The Subcommittee also intends to approach the Subcommittee for Dose Reconstruction Reviews about working together in the review of Dose Reconstruction Templates. Those are technical documents that guide dose reconstructions for sites that do not have Site Profiles. Previous Subcommittee discussions have illustrated the usefulness of reviewing affected cases in conjunction with the Templates.

Preparation for December 2023 Full ABRWH Meeting: Review of Technical Guidance Documents Ready for Full Board Approval

Kathy Behling, SC&A, presented the list of documents that the Subcommittee has completed reviewing, but which it has not yet presented to the full Board. After a brief discussion, the Subcommittee asked Kathy to select four for presentation at the next full Board meeting and inform them through email.

Newly Issued Guidance Documents and Supplemental Topics

SC&A will complete Subtask 4 of their review of PERs-040, -051, -083, and -067; DCAS will provide cases that meet the selection criteria for SC&A's review. The Subcommittee also tasked SC&A to review OTIBs-0036, -0040, and -0093.

Meeting Adjourned

The Subcommittee tentatively scheduled the next meeting for Thursday, March 14, 2024, at 11:00 Eastern time. The meeting was adjourned at 3:09 p.m. EST.