

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

February 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, Member
Loretta Valerio, Member
Paul Ziemer, Member

Non-Members

Rashaun Roberts, Designated Federal Official
Nancy Adams, NIOSH contractor
Bob Barton, SC&A
Kathy Behling, SC&A
Ron Buchanan, SC&A
Grady Calhoun, DCAS
Doug Farver, SC&T
Rose Gogliotti, SC&A
Ashton Habighurst, HHS
LaVon Rutherford, DCAS
Muttu Sharfi, ORAU
Tim Taulbee, 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 February 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 September 29, 2022, SPR Meeting

Discussion of ORAUT-OTIB-0052

Kathy Behling, SC&A, presented the history of the Subcommittee's discussions concerning ORAUT-OTIB-0052, "Parameters to Consider When Processing Claims for Construction Trades Workers." The Subcommittee presented OTIB-0052 to the Board in December 2017. That presentation showed how revisions to OTIB-0052 had resolved the sixteen findings from the Subcommittee's review of rev. 0 of the OTIB. Board members had a number of questions that could not be answered at that meeting. At today's meeting, the Subcommittee discussed whether DCAS should respond to each of those questions, since the new co-exposure Implementation Guide, and DCAS's work to update models to conform to that guide, will make several issues moot. The Subcommittee decided to ask DCAS to prepare responses to questions that could be answered in short order. The implementation of new co-exposure models at each site will satisfy the others.

List of Sites with Template Methodologies

Kathy Behling, SC&A, led a discussion on this topic, referring to a handout that was provided to Subcommittee members. A copy of that handout is on the DCAS website page for this meeting. It lists 33 sites where DCAS uses dose reconstruction methodologies and templates for guidance when performing dose reconstructions, rather than site profiles. Site profiles are being prepared for four of those sites. There was general agreement that a review of an affected dose reconstruction should be part of the review process for methodologies and templates.

Table 2 of SC&A's handout lists seven Program Evaluation Reports (PERS) and one report that have not yet been reviewed by SC&A. Additionally, Ms. Behling reported that SC&A's reviews of two other PERs, PER-047 and PER-005, did not include Subtask 4, which has been a part of PER reviews for some time.

After some consideration the Subcommittee and DFO tasked SC&A to complete Subtask 4 for PERs -047 and -005, to perform complete reviews of PERs -040, -051, -067, and -083, and to perform reviews of methodologies and templates for Amchitka Island Nuclear Explosion Site and Albuquerque Operations Office.

ORAUT-TKBS-0060, rev. 00, “Grand Junction Facilities” Observation 3 radon chamber

Dr. Ron Buchanan, SC&A, presented SC&A’s observation 3 from their review of ORAUT-TKBS-0060, Rev. 00. This observation concerns the potential for radon exposure from radon calibration chambers located at Grand Junction. The subcommittee discussed this observation a year ago, and asked DCAS to provide documentation about the radon chamber to SC&A. DCAS provided five documents in May 2022. Those documents describe how radon exposures were calculated and recorded for workers at the radon chamber for three years of its operation. The highest exposure recorded during that time was about 0.0022 working level months. ORAUT-TKBS-0060 calls for radon exposure of 0.340 working level months per year for all Grand Junction employees. Consequently, the Subcommittee concluded that ORAUT-TKBS-0060 bounds the radon exposures for Grand Junction employees, and the Subcommittee voted to close this observation. This was the only remaining open observation from SC&A’s review.

DCAS-PER-049, Subtask 4 case internal review

Kathy Behling, SC&A, led this discussion. She remarked that the Subcommittee had previously accepted SC&A’s Subtask 4 PER review of a case from Paducah Gaseous Diffusion Plant. PER-049 was prepared because of changes in the external dose methodology for Paducah. SC&A had no findings in their review, but they noted that the internal dose in the reworked case increased significantly over the original value. This was surprising since the reworked case used the individual’s actual bioassay data, while the original version of the dose reconstruction utilized OTIB-002, which is expected to overestimate internal dose. In response, Scott Siebert, ORAUT Team, explained that by the time the case was reworked as part of PER-0049, OTIB-002 had been cancelled. Consequently, the dose reconstructor used overestimating techniques that employed the individual’s detectable and non-detectable bioassay results. Mr. Siebert explained that the intakes in the reworked dose reconstruction would cause bioassay results that were higher than the individual’s bioassay results roughly 80% of the time. When Mr. Siebert re-worked the internal dose for this case, using intakes that would result in bioassay results that more closely matched the individual’s results, the resulting dose was lower than either the original dose reconstruction or the rework. Since the Subcommittee had already accepted SC&A’s review of PER-0049, there was no further action for them to take, but they plan to discuss this situation at the next Board meeting.

Newly issued SC&A reviews

DCAS-PER-092, “Weldon Spring Plant,” Subtask 4 case review

Dr. Ron Buchanan, SC&A, described SC&A’s Subtask 4 of PER-092, which consisted of reviewing two cases that were reworked as part of this PER. DCAS prepared PER-092 because of revisions to the Weldon Spring site profile that could result in higher internal doses and external ambient doses. For one of the cases, SC&A had two observations. In both cases, DCAS’s rework had adopted approaches that slightly

overestimated the doses. For the second case, SC&A had one finding and two observations, The observations, again, were that DCAS's rework had adopted approaches that slightly overestimated the doses. The finding was that DCAS's rework had used a constant distribution for external ambient dose, rather than the log-normal distributions that the site profile called for. SC&A recalculated the ambient dose using a log-normal distribution and got a slightly higher combined probability of causation (POC) for the case. The POC was still far below the 50% compensation level, though.

Subcommittee members asked if the error that led to the finding could have affected the compensation outcome for other reworked cases. Scot Siebert, SC&A reported that, upon learning of this finding he had reviewed all the reworked cases and found nine that included this error. All those cases had POCs less than 1%, so this error would not affect the compensation outcome. He also reported that the approaches that led to the observations were common efficiency approaches that were used in non-compensable claims. The Subcommittee asked DCAS to provide Kathy Behling, SC&A, a brief statement summarizing Mr. Siebert's comments for her to include in her finding/observation tracking. Then the Subcommittee would close the finding. Lori Marion-Moss, DCAS, agreed to provide that.

DCAS-PER-093, "Texas City Chemicals," Subtask 4 case review

Rose Gogliotti, SC&A, presented the results Subtask 4 of SC&A's review of PER-093. DCAS issued PER-093 because of the issuance of Rev. 1 of the site profile. That revision changed the start date of the residual period and increased certain doses during the residual period. SC&A's review resulted in four findings and one observation. The first finding involved the selection criteria DCAS used to determine which Texas City claims to rework under the PER. Ms. Gogliotti noted that a claimant whose employment ended between April 1, 1955, and October 1, 1955, would have an increased dose due to Rev. 1 of the site profile, but they would not be reworked based on the selection criteria that DCAS employed. The other three findings found that the reworked dose reconstruction did not comply precisely with the instructions in Rev. 1 of the site profile. Those deviations would result in slight underestimates of dose. The observation concerned the ease of use of the software tool that DCAS used to complete the reworked claims. DCAS reported that they had not developed a response to SC&A's Subtask 4 review but would do so in the future. The Subcommittee considers the findings and observation to be "in progress."

Peak Street Template case reviews

Mr. Doug Farver, SC&A, presented the results of SC&A's review of two cases from Peak Street. Cases from Peak Street are completed using guidance from a site Template rather than a Site Profile. Templates are less formal dose reconstruction technical documents that are used for sites that don't have many claims. SC&A has previously reviewed the template itself and developed findings. Resolution of those is in progress. For external exposure, the cases that were selected for SC&A review included only ambient dose, so they could not be evaluated in light of the earlier findings about external dose. The cases did involve internal dose so they could be evaluated in

light of an earlier observation about bioassay detection levels. In 2017, DCAS developed a co-exposure approach for estimating internal doses. One of the cases SC&A reviewed was reworked by DCAS using that co-exposure approach, and that rework essentially resolved SC&A's previous observation. However, the other case the SC&A review was performed before the co-exposure approach was available, and that case used bioassay detection levels that were the cause of SC&A's observation. SC&A suggested that they be assigned to review additional cases so that they could review cases that would be affected by their earlier findings related to the Template itself.

The Subcommittee decided that SC&A should review additional cases that included all the dose pathways that the Template addressed, and DCAS agreed to provide such cases to SC&A. All participants agreed that future reviews of Templates should incorporate case reviews from the outset.

Preparation for April 2023 Full ABRWH Meeting: Review of technical guidance documents ready for full Board approval

The Subcommittee decided to present their completed reviews for six documents at the next full Board meeting. SC&A will prepare the presentation. The documents that the Subcommittee plans to present are PER-045, PER-076, PER-077, PER-043, PER-059, and PER-049. Kathy Behling, SC&A, reported that some of the documents the Subcommittee has reviewed have very extensive discussions and don't lend themselves to the type of presentation that the Subcommittee has been using when presenting completed reviews to the full Board. The Subcommittee expects those final reviews to involve considerably more discussion at full Board meetings, and consequently doesn't intend to present very many at a single meeting. Ms. Behling proposed to use OTIB-052 to provide an example of how one of those presentation might be put together at the next Subcommittee meeting. The Subcommittee agreed with that idea.

Newly-Issued Guidance Documents and Supplemental Topics

For the next Subcommittee meeting, SC&A has been assigned one new document, PER-073 which relates the Birdsboro facility, for review, and they believe that review will be ready. As was agreed, DCAS will provide some text that summarizes the response to the Weldon Spring Subtask 4 finding and observations. SC&A will review additional Peak Street cases, and also will provide a presentation of the Subcommittee's OTIB-052 discussion, as an example of a more complicated report to the full Board.

Meeting Adjourned

The Subcommittee tentatively scheduled their next meeting for Wednesday, June 21, 2023, with a backup date of June 28. The meeting was adjourned at 3:29 p.m. EST.