THE ADVISORY BOARD ON RADIATION AND WORKER HEALTH
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
CENTERS FOR DISEASE CONTROL AND PREVENTION

Summary Minutes of the Forty-eighth Meeting
July 17-19, 2007

The Forty-eighth Meeting of the Advisory Board on Radiation and Worker Health (ABRWH or the Board) was held July 17 through 19, 2007 at the Red Lion Richland Hanford House in Richland, Washington. The meeting was called by the Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health (NIOSH), the agency charted with administering the ABRWH. These summary minutes, as well as a verbatim transcript certified by a court reporter, are available on the internet on the NIOSH/Office of Compensation Analysis and Support (OCAS) web site located at www.cdc.gov/niosh/ocas.

Those present included the following:

Board Members:

Dr. Paul Ziemer, Chair; Ms. Josie Beach; Mr. Michael Gibson; Mr. Mark Griffon; Dr. James Lockey; Dr. James Melius; Ms. Wanda Munn; Dr. John Poston; Mr. Robert Presley; Dr. Genevieve Roessler (telephonically); and Mr. Phillip Schofield.

Designated Federal Official: Dr. Lewis Wade, Executive Secretary.

Federal Agency Attendees:

Department of Health and Human Services:

Mr. Larry Elliott, Dr. Sam Glover, Mr. Stuart Hinnefeld, Ms. Laurie Ishak-Breyer, Dr. James Neton, Mr. LaVon Rutherford, Mr. Tom Tomes (NIOSH); Ms. Emily Howell, Ms. Liz Homoki-Titus (Office of General Counsel); Ms. Chia-Chia Chang (Office of the Director of NIOSH); Mr. Jason Broehm (CDC Washington).

Department of Labor: Mr. Steve Beettler, Ms. Christy Long.

Department of Energy: Ms. Colleen French, Ms. Gail Splett, Ms. Debi Struthers.

Contractors:

Mr. Leo Faust, Ms. Kate Kimpan, Mr. Matthew McFee, Ms. Mary Jo Zucchert (the ORAU team) Oak Ridge Associated Universities.

Mr. R. W. Bistline, Mr. Joe Fitzgerald, Dr. Arjun Makhijani, Dr. John Mauro and Ms. Kathy Robertson-DeMers, Sanford Cohen & Associates.

Congressional Staff Members:

Ms. Sarah Bermingham (Senator Charles Schumer) via phone; Ms. Sharon Block (Senator Edward Kennedy) via phone; Ms. Dixie Duncan (Congressman Doc Hastings); Ms. Kristen Eby (Senator Maria Cantwell); Ms. Barb Lisk (Congressman Doc Hastings); Mr. Robert Stephan (Senator Barack Obama) via phone; Ms. Rebecca Thornton (Senator Patty Murray); Mr. Dan Utech (Senator Hillary Rodham Clinton) via phone.

Other Participants:

See Registration

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Tuesday, July 17, 2007

WELCOME AND INTRODUCTIONS

Dr. Paul Ziemer, Board Chairman, called to order the 48th meeting of the Advisory Board on Radiation and Worker Health. He asked the record indicate two Board members were not physically present, **Dr. Genevieve Roessler** and **Mr. Bradley Clawson**, although **Dr. Roessler** was attending via telephone. **Mr. Clawson** would most likely not be able to attend. **Dr. James Melius**, also not present at the moment, will join the group shortly. **Dr. Ziemer** also noted that **Ms. Chia-Chia Chang** from the office of the Director of NIOSH was sitting in as Designated Federal Official. **Dr. Lewis Wade** was expected the following day.

Ms. Chang expressed **Dr. Wade**'s regrets at not being able to be present on this day because of a scheduling conflict. She thanked the Board members for their work, and brought greetings from **Dr. John Howard**, Director of NIOSH, and **Mr. Mike Leavitt**, Secretary of HHS.

Dr. Ziemer announced the availability of copies of the meeting agenda and many of the handouts, as well as copies of the CD/DVD recently released by NIOSH which gives a capsule summary of the program. He noted there are two public comment sessions scheduled, and invited those wishing to participate in either or both to indicate such on the sign-up sheets provided.

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NIOSH PROGRAM UPDATE

Mr. Larry Elliott, Director
NIOSH Office of Compensation and Support

Mr. Elliott presented the NIOSH update on the program, providing the overall initial claim information of 24,481 cases referred from DOL for dose reconstruction; 79 percent have been completed and returned, 20 percent are still at NIOSH for dose reconstruction, with one percent having currently been administratively closed. **Mr.**

Elliott provided additional information on current case status, both with charts and percentages of the cases completed, pulled for SEC, administratively closed, active and pending.

Completed dose reconstructions were summarized, with **Mr. Elliott** noting that 29 percent had a POC in excess of 50 percent, with 71 percent having a POC of less than 50 percent. A graph was presented providing the distribution of the POCs from all covered sites, incrementally showing the number of cases with POCs of zero to ten percent, 11 to 20, 21 to 30, 31 to 40, 41 to 49, and those over 50 percent.

As an overview of the 4,895 active cases at NIOSH, **Mr. Elliott** indicated 1,646 have been assigned to a health physicist for dose reconstruction; 692 draft DR reports are in the hands of claimants and NIOSH is awaiting return of the completed OCAS-1 form; 2,557 cases have not yet been assigned; and 53 percent of the total number of cases are older than one year.

An updated summary of efforts to complete the first 5,000 cases showed 4,192 final reports have been sent to DOL; 245 cases have been pulled; 250 have been returned by DOL for further work; 166 have been pulled for SEC review; 57 have been administratively closed; 24 DRs are in the hands of claimants; with only six remaining cases awaiting dose reconstruction.

On the graph showing submittals to NIOSH from DOL versus NIOSH production, **Mr. Elliott** called attention to the fact that there has been an up-trend in cases received in the last quarter and a half. This has somewhat worked against the constrained resources of NIOSH over the past couple of months. **Mr. Elliott** expressed a concern that he didn't want to see another backlog start to build, but noted that with the new fiscal year funding available in October, they will be back up to speed. He explained other funding sources from DOL and CDC that will enable ORAU to work as best they can until the new fiscal year.

Addressing a graph depicting reworks received back from the Department of Labor, **Mr. Elliott** explained the spike in the third quarter of '07 was primarily due to the PERs NIOSH has been developing. The PER relative to super S plutonium has affected a number of claims across many sites, affecting the numbers for that period.

Other statistics included the DOE response to requests for exposure records, with less than 500 outstanding requests and less than 100 of those being more than 60 days old.

Technical support and dose reconstruction activities on AWE sites included two TBDs developed by Battelle and now approved by NIOSH relative to uranium metal and uranium refining, as well as eight site-specific appendices to those TBDs. An additional eight site-specific appendices are in review, with all those sites being enumerated for the assembly.

Mr. Elliott reported there have been 11 Program Evaluation Reports completed, all of which are on the web site. He encouraged members of the Board and the public to read

them very closely, but explained briefly what each addressed.

Speaking to NIOSH achievements, **Mr. Elliott** included the completion of nearly 80 percent of all dose reconstructions, review of 93 SEC petitions and addition of 17 SEC classes. Others mentioned were revision of the NIOSH conflict or bias policy and a revised acknowledgment packet for claimants; completion and distribution of the NIOSH dose reconstruction video; dose reconstruction workshops; new FAQ sheets for the public; outreach meetings, both SEC and worker outreach; town hall meetings; public meetings for input on SEC procedures; Congressional responses, briefings; e-mails received, calls received by OCAS and ORAU; NIOSH participation at and support to 52* Board meetings and 43 working group meetings.

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Discussion Points:

- Clarification of the graph showing the recent reworks spike and its relation to the PER addressing super S plutonium;
- Discussion of the upsurge in cases coming from the Department of Labor;
- A suggestion that the ombudsman make a presentation at a meeting to bring the Board up to date on how the outreach programs are working.

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DEPARTMENT OF LABOR PROGRAM UPDATE

Ms. Christy Long, District Director
Seattle Office

Ms. Long presented statistics on the number of cases received, number of claimants, number of cancer cases and the number of cases referred to NIOSH for dose reconstruction. She included figures on the Part E program, along with a breakout of the compensation paid relative to Part B from the total $2.7 billion paid to date. With some 31,581 total EEOICPA payees, 25,395 of those were through Part B; 10,394 cancer cases, 4,520 from NIOSH dose reconstructed cases and 4,855 RECA case payees.

Referencing the Part B cancer case status, **Ms. Long** noted that 37,538 cases were represented by 57,226 claims; 28,264 cases have final decisions, 2,215 with a recommended decision, 4,330 cases are at NIOSH for dose reconstruction, 2,730 are pending DOL decisions. In the cancer case final decisions, 10,634 had final decisions for compensation, with 17,630 denial decisions. That number was broken down as to non-covered employees, POCs under 50 percent, insufficient medical evidence, non-covered conditions and ineligible survivors.

Addressing SEC-related case, **Ms. Long** reported that 1,314 cases have been withdrawn for SEC review. There have been 958 final decisions, 891 approvals and 67 denials; 94 cases have been recommended, but with no final decision; and 167 cases are

pending.

Compensation on NIOSH cases **Ms. Long** reported totaled $811 million paid to 8,242 payees in 5,437 cases; $675 million has been paid on dose reconstructed cases and $136 million through added SEC classes.

Ms. Long also provided information on the sites scheduled for discussion at this meeting, displaying figures on the number of cases and claims for both Parts B and E, where applicable; the number of dose reconstructions, final decisions, approvals and total compensation paid. That information was given for Hanford, Ames Laboratory, Blockson Chemical, Chapman Valve, Sandia Livermore and Bethlehem Steel.

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Discussion Points:

- Clarification on multiple payees on individual claims so that compensation is spread among more than one payee;
- Numbers should reflect the compensation figure times the number of cases rather than payees;
- Clarification of terminology, rework versus reopening, from the perspective of DOL versus NIOSH;
- NIOSH doesn't use the term "reopening" but rather considers all returned cases as reworks;
- Whether there's a trend in the types of things causing a return to NIOSH for a rework;
- Clarification that, as has been explained before, many reworks deal with a change in demographic information such as additional cancer, additional employment, a new survivor, et cetera;
- It would be useful if DOL would continually update the Board on that breakdown as it evolves;
- Discussion of the increased number of cases from the Department of Labor point of view;
- A discussion of the likelihood of being able to track the increase of claims as a factor of outreach meetings.

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WORKING GROUP REPORTS

Before beginning the workgroup reports, **Dr. Ziemer** announced one change in workgroup assignments. **Mr. Mike Gibson** was recently appointed as the chair of the workgroup on worker outreach, and was also chairing the Savannah River Site workgroup. **Mr. Gibson** asked to be relieved of the SRS position, staying on the workgroup but relinquishing the responsibilities of the chair, so that he can spend more time on the worker outreach workgroup and be available to attend some of those meetings. **Mr. Mark Griffon**, also a member of the SRS workgroup, agreed to serve as its chair. While not

yet available on the web site, this change has been made.

Dr. Ziemer indicated he would go through the workgroups in the order they appear on the web site, but would skip over those reports on sites to be discussed later in the meeting, taking those reports when they appear on the agenda.

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Conflict of Interest Policy Workgroup

Dr. James Lockey, Chair

Dr. Lockey suggested that perhaps counsel could comment on this issue, in that the workgroup is on hold until they get further clarification about the direction they need to take.

Ms. Emily Howell from the Office of General Counsel indicated that they're awaiting further instruction from HHS, but she had spoken with **Drs. Lockey** and **Wade**, and they'll be proceeding within the next few weeks and hope to have some progress to report by the October meeting.

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Fernald Site Profile Workgroup

Mr. Robert Presley
(Mr. Bradley Clawson, Chair)

As a member of the workgroup, **Mr. Presley** reported in **Mr. Clawson**'s absence and indicated the group has not met. He indicated they have been receiving some materials by e-mail which the group has been reviewing. His understanding is that no meeting is currently scheduled, but that will be done as soon as time permits.

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Los Alamos Site Profile and SEC Petition Workgroup

Mr. Mark Griffon, Chair

Mr. Griffon reported that the group has also not met. He indicated one thing the group wanted to understand was the NIOSH position on the site profile modifications. He noted it was his understanding that they're doing some research and he didn't want to push for a workgroup meeting until there was something to which SC&A could actually respond. If things are still evolving, there's no point in having SC&A do a lot of work until they know better the status on that site profile.

Dr. James Neton, on behalf of NIOSH, added that they would be in a better position to answer that question tomorrow when **Dr. Sam Glover** arrives since he has been

intimately involved with the site profile revisions.

Speaking on behalf of SC&A, **Mr. Joe Fitzgerald** clarified that the question they have is what to do in the post-'75 period since the SEC petition up to the 1975 has been decided.

Dr. John Mauro from SC&A added that this is a recurring theme in that the same holds true for Fernald and Hanford. He declared it worthy to note there were a number of site profile reviews in the closeout process when the SEC petitions changed the work being done on those sites. The site profile work was being eclipsed by the SEC issues, although they're simultaneously addressing them both.

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Linde Ceramics Workgroup

Dr. Genevieve Roessler, Chair

Dr. Roessler reported that this workgroup had hoped to have a response by late June from some worked turned over to ORAU in March. A note from OCAS indicated there would be a delay in completing that, which involved urinalysis data for the Linde review.

Dr. Ziemer observed that was similar to some of the other reports in that there are pieces of information that workgroups are waiting on before they can move forward.

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Nevada Test Site Workgroup

Mr. Robert Presley, Chair

Mr. Presley reported he had spoken with **Mr. Mark Rolfes** at NIOSH and they're waiting for some of the Technical Basis Documents to be completed so the workgroup can make its final decision. The delay has been partially because of the amount of work NIOSH has had, and they hope to have something on this before the next full Board meeting.

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Procedures Review Workgroup

Ms. Wanda Munn, Chair

Ms. Munn reported that her group had not met for almost a year because there was so much activity with respect to the material they would need to cover, with a large number of procedures in the process of review and many new technical documents being generated. She noted SC&A had done an excellent job of pulling together a matrix of procedures that will have to be addressed.

Ms. Munn remarked that in a teleconference meeting on the 26th of June they had identified several items of major interest, providing other details on information received and information awaited. She announced the workgroup is scheduled for a face-to-face meeting in Cincinnati in late August.

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Rocky Flats Workgroup

Mr. Mark Griffon, Chair

Mr. Griffon indicated he had nothing to report at this time.

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SEC Issues (including 250 workday requirement) Workgroup

Dr. Paul Ziemer
(Dr. James Melius, Chair)

As a member of the workgroup, **Dr. Ziemer** reported in **Dr. Melius**' absence that the workgroup has not met since the last full Board meeting and there was nothing further to report.

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Dr. Ziemer observed that the workgroup on SEC Petitions failing to qualify for evaluation, Chaired by **Dr. James Lockey**, had presented their closeout report at the last Board meeting. That workgroup will be removed from the list.

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Worker Outreach Workgroup

Mr. Mike Gibson, Chair

Mr. Gibson reported his group had not yet met, but hoped to have a teleconference in the next few weeks. He wanted also to attend some of the outreach meetings before the September full Board meeting.

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Savannah River Site Workgroup

Mr. Mark Griffon, Chair

Mr. Griffon reported the group has a status or interim report from SC&A. There had been a classified meeting at the site to look at a database, although the one they were looking at wasn't the database they thought they would see. Therefore they have to resolve the database pedigree question, but several actions arose from that meeting and **Mr. Griffon** indicated he had volunteered for the task of noting some action items and circulating them to the workgroup and NIOSH as a reminder. He remarked he was just finalizing that and would be circulating it soon.

Mr. Griffon added that his preference would be to get a status report on some of the actions that were arranged for in the earlier meeting and called for **Mr. Fitzgerald** from SC&A to comment.

Mr. Fitzgerald observed that this is the first follow-up to a site profile and that, as they've gone through the process, **Dr. Glover**, the workgroup and SC&A have closed out a number of issues, with some still requiring information from DOE, et cetera. SC&A is proposing to take the status summary, the work progress report, and put that together to make it available to the Board as they continue to chase some of the remaining issues. He commented a current draft is with **Dr. Glover**, just to see if he agrees with SC&A's perspective and whether the workgroup is on board.

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Dr. Ziemer observed that **Dr. Melius** had joined the assembly and inquired if he had anything to add on the workgroup he chairs. **Dr. Melius** said that at their meeting they had tried to identify some particular cases and exposure situations at NTS and that relatively recently such information has been provided to SC&A. He asked **Dr. Arjun Makhijani** from SC&A for his comments.

Dr. Makhijani remarked they had begun looking at the material but there was nothing substantive to report.

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Subcommittee on Dose Reconstruction Reviews

Mr. Mark Griffon, Chair

Mr. Griffon reported on their meeting held earlier in the day during which they had discussed primarily the topics of blind reviews of the dose reconstruction process, advanced versus basic reviews, and a status update on the current sets of case reviews, where they stand and where they're going in the future.

He reminded the Board that in their original contract with SC&A there were to have been some blind reviews, although none had been done to this point. Out of the subcommittee meeting they came up with a recommendation for the Board's consideration.

The subcommittee recommends that the Board should task SC&A with

conducting two blind reviews, both being done with two different approaches. The first approach would be a dose reconstruction using available NIOSH tools, and the second approach would be a dose reconstruction using best health physics practices without the use of NIOSH tools but in accordance with the letter and intent of the statute and the regulations. While this work may not be completed in Fiscal Year '07, it should be initiated and conducted as part of the FY '07 activities.

Coming as a recommendation from the subcommittee, the motion required no second and was on the floor for discussion.

Discussion Points:

- The subcommittee discussion indicated that blind reviews were going to take place from raw data specifically, and that was not incorporated into the motion;
- Clarification of the intent of the motion, with a suggestion that it can be expanded if necessary, the motion having been written with an eye toward brevity;
- A discussion about why only two blind reviews were being considered;
- This should be viewed as somewhat of a pilot study and whether the approaches are right, et cetera;
- No need to commit to doing more reviews when it isn't clear what it will cost in terms of time and money, and whether it will provide answers to the questions;
- In doing the blind DRs using two different approaches, the process may turn out to be as important as the outcomes, and then will lead to next steps;
- The Board initially budgeted for two blind reviews per year;
- Clarification as to whether the commitment is to evaluate whether blind reviews are worth doing or whether it's an effort to work out the best approach;
- A discussion relative to the sorts of questions for which the blind reviews are an attempt at finding answers, one of which is how well did NIOSH do in reconstructing the dose for a given claim using their approaches;
- Another question could be is there another approach that gets the job done with more accuracy and in a quicker time frame;
- The blind review is an ultimate external peer review;
- Another reason is to assure NIOSH is obtaining all the necessary and available information for doing a dose reconstruction;
- Perhaps before SC&A gets the assignment for the blind reviews, the subcommittee should start the process of drafting a set of goals for what they would like the blind reviews to reveal;
- Issues raised as to data-gathering are more appropriately addressed in the advanced reviews;
- Totality of information should be part of both blind and advanced reviews;
- One type of blind review finding that might emerge is that, regardless of which method is being used, there was insufficient information in the file to address some particular question.

The motion carried by unanimous vote.

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Mr. Griffon circulated the 4-page document regarding the scope of work for the dose reconstruction reviews for basic and advanced reviews which had been discussed in the subcommittee's meeting. **Mr. Griffon** emphasized the subcommittee had not developed a formal motion and the document was for their discussion, which was in its early stages. They will come back to the Board with a proposal on this. The subcommittee plans to draft language to better define what the Fiscal Year '08 advanced reviews will be for SC&A, and mechanics of how to go about it.

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Also discussed in the subcommittee meeting was the status of case reviews. **Mr. Griffon** reported that still underway was the fourth set of cases. There are some outstanding issues and that will take a little bit more time before they can come back to the comment resolution process.

The fifth set of cases is near to closeout, with not as many difficult issues left on the table as in the fourth set.

The sixth set matrix has been finalized by SC&A and that is almost ready to bring into the workgroup process, and may be on the agenda for the next meeting, if possible.

SC&A is completing their review of the seventh set of cases and plans within the next two to three weeks to contact the Board teams and have conference calls scheduled with Board members on individual cases. Subsequently a matrix would be brought forward to the subcommittee in the same manner.

The eighth set of cases was just selected. NIOSH is putting those cases together to send to SC&A and they will soon commence work on that.

Dr. Ziemer added that there are 30 cases in the eighth set to be reviewed, and he had assigned teams of two. Each team will have five cases to review and he indicated he would distribute those assignments at the workgroup meeting on Thursday.

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STATUS REPORT ON UPCOMING SEC PETITIONS

Mr. LaVon Rutherford,
SEC Health Physics Team Leader

Mr. Rutherford explained the purpose of his update is to keep the Board current on the number of qualified petitions under evaluation and the sites being evaluated through the 83.14 process, and to provide SEC information to the Board to support their preparation for future working group sessions and Board meetings.

As of July 12 NIOSH has received 93 SEC petitions, nine of which are in the qualification process; 40 have qualified for evaluation, eight have an evaluation in progress and 32 evaluations have been completed. There have been 39 petitions not qualifying for evaluation.

The evaluation reports with the Advisory Board for recommendation are Chapman Valve, Blockson Chemical, Feed Materials Production Center, Bethlehem Steel, Sandia National Lab Livermore, Hanford early years and Y-12 statisticians 1958/1959. Petitions currently in the evaluation process include Hanford, January 1, 1947 to December 31, 1990; NUMEC, administrative employees from 1967 to 1986; NTS, all locations and all employees, January 1, 1963 to September 30, 1992; and Lawrence Livermore National Lab, all locations and all employees, January 1, 1950 to December 31, 1973.

There are a number of sites on which NIOSH is working through the 83.14 process. **Mr. Rutherford** observed that has been slowed, however, due to resource constraints. In the interim, NIOSH has focused its resources on completing the 83.13 SEC evaluations in its effort to meet the 180-day requirement.

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Discussion Points:

- Discussion relative to some of the expected completion dates and dates for presentation of evaluation reports;
- Discussion of the requirement that evaluation reports be completed within 180 days and the fact that the Hanford evaluation report has been divided into two segments, with one portion being completed within that 180-day mark and the other within an additional 180 days;
- The ones being penalized by the 180-day requirement are the people waiting for the petition to be developed and answered;
- That 180-day requirement is Congressional, and NIOSH does everything possible to work within it;
- The petitioner is informed on the issue when it can't be met, and it is hoped the dilemma is understood;
- The NUMEC petition's 180 days was up this past week, the petitioners were contacted and the report's status was discussed with them;
- There is a concern about classified information being dealt with on that site, but the petitioners have been informed.

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PUBLIC COMMENT PERIOD

Public comment was solicited on two days of the meeting. The following is a list of the members of the public who spoke during this day's session. A full transcript of their comments is available on the NIOSH/OCAS web site, www.cdc.gov/niosh/ocas.

Ms. Gai Oglesbee, Hanford claimant; Ms. Barb Lisk, representing Congressman "Doc" Hastings; Mr. Charles Shatell, Hanford claimant; Ms. Kathryn Guffey, spouse; Mr. Chris Janos, claimant representative; Mr. Lloyd Chalcraf, retiree; Ms. Kay Barker, ANWAG; Ms. Vina Colley, Portsmouth; Ms. Joanie Fiering, Portsmouth; Mr. Arthur McDaniel, Hanford; Ms. Linda Adkins, spouse survivor.

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With no further comments, the Board officially recessed until 9:45 a.m.

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Wednesday, July 18, 2007

Dr. Ziemer called to order the second day of the meeting, asking that everyone remember to register their attendance, and reminding everyone of the handouts and other documents provided for the convenience of those who may be interested. **Dr. Lew Wade**, the Designated Federal Official, was welcomed and **Dr. Ziemer** asked for any opening remarks he may wish to make.

Dr. Wade offered apologies for his absence the previous day, and thanked **Ms. Chang** for sitting in for him. **Dr. Wade** acknowledged the effort of the Board members on behalf of HHS and thanked them for having done so.

With **Dr. Gen Roessler** being present by phone, although **Mr. Brad Clawson** would likely continue to be absent, **Dr. Ziemer** announced a quorum.

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CHAPMAN VALVE SEC PETITION

Dr. Ziemer explained that at a previous meeting the Chapman Valve SEC petition had been on the agenda and **Dr. Roessler**, on behalf of the workgroup, made a presentation and recommendation on that issue. At that time there was an SC&A report the petitioners had not yet received, and so consideration of the petition was tabled in order to permit the petitioners to review that document. He noted it would be appropriate now to remove the motion from the table and to have discussion from petitioners and the workgroup, and he would entertain such a motion at this time.

A motion was duly made and seconded to remove consideration of the Chapman Valve SEC petition from the table.

The motion was open for discussion.

There followed clarification that there might have been another concern about this petition that had to do with the issue of the covered period, and some additional information available on that matter.

Speaking on behalf of NIOSH, **Dr. James Neton** advised that the additional information requested is not relevant to the vote on this particular time period. The time period at issue is 1948 and '49. The additional activities were believed to be well before that time and would not have any bearing on this particular class designation.

Dr. Melius offered his opinion that it wasn't **Dr. Neton's** prerogative to tell the Board what it could consider in voting.

Discussion Points:

- There is no additional information from DOL on their evaluation of additional activity that occurred prior to 1948;
- A representative of DOL was present when this issue was raised in May in Denver, and it was understood that DOL would be back in touch with NIOSH if they were going to adjust the time frame for that AWE.

Dr. Ziemer summarized that there has been no change in the status on that issue. DOE and DOL have been reviewing various site time frames such as DOE's site-descriptive listings. They've removed three or four sites that are no longer covered, but nothing has been heard relative to Chapman Valve, changing its covered period or its designation as an AWE.

Clarification that once the Board votes to bring the issue back on the table, there will be additional discussion opportunity to refresh recollections.

The motion to consider the Chapman Valve Petition during this Board meeting carried by a vote of six to five.

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Dr. John Poston, chairman of the Chapman Valve working group, reviewed the previous motion from the working group and asked **Dr. Neton** to give the Board an update and indicated that, following that, he would go over a short presentation of what the workgroup has done so far.

Dr. Neton reminded the Board of some of the specifics on the petition, which was presented initially at the September, 2006 meeting. At that time the workgroup was established to review the evaluation report in conjunction with SC&A. Chapman Valve was a facility that machined natural uranium rods into slugs for the Brookhaven Graphite Research Reactor in the '48/'48 time frame. A section of the plant known as Building 23 was partitioned off and was where those activities were performed. The expanded definition was for all workers who were monitored or should have been monitored for work performed in Building 23 from January 1, 1948 through December 31, 1949. There was also a residual contamination period from 1991 to 1993.

In the evaluation report NIOSH recommended the class be denied in that it was

possible to perform dose reconstructions with sufficient accuracy for the facility. The working group conclusions will be presented by **Dr. Poston**.

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Dr. Poston presented a history of what happened in terms of the outreach meetings and the meetings of the working group. That group consisted of **Mr. Mark Griffon**, **Mr. Brad Clawson**, **Dr. Genevieve Roessler**, and **Mr. Mike Gibson**. **Dr. Poston** indicated he had accompanied **Dr. John Mauro** and **Dr. Arjun Makhijani** from SC&A on a site visit, and had participated in some interviews, tours, et cetera, to better understand the issues on which the group had been charged to make decisions. There were both face-to-face meetings and teleconferences to resolve those issues.

Dr. Poston went over some of the information **Dr. Neton** had described earlier, noting that the production period was actually shorter than the two-year '48/'49 time period, but that is what has been designated by the Department of Labor as the covered period. The second, later period for residual contamination is more recent.

An issue raised that has never been brought to the working group was in terms of a period before 1948. That was not addressed. The group was not charged to address it. They focused strictly on the two time periods in the petition.

Dr. Poston noted the workgroup did a fair amount of work and had a good working relationship with NIOSH and SC&A, looked at various reports including an H. K. Ferguson report which provided a lot of details on the machining of uranium and its use in the Brookhaven reactor. He observed there was a considerable amount of documentation they were able to review to arrive at an understanding of issues and exposure pathways associated with the operation. He remarked that in this type of operation issues such as airborne radioactivity are somewhat minimal.

Dr. Poston commented that NIOSH had taken a position that they had data to provide bounding estimates of exposures at the facility, and made assumptions which are quite conservative and, in the opinion of the workgroup, actually overestimated doses that could have been received from these exposures. The working group agreed with the time period for the petition and, while the dose estimates rely heavily on a limited number of bioassay samples, the conservative assumptions take that into account.

Dr. Poston explained that after a lot of discussion -- among not just the working group but NIOSH staff, SC&A staff and the working group -- they had concluded that the NIOSH approach would provide a bounding but very claimant-favorable estimate of doses to the workers over the period of interest. Based on that conclusion, they did not recommend SEC status as being warranted for this particular situation.

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Congressional Comment

Ms. Sharon Block from **Senator Ted Kennedy**'s staff spoke on behalf of the petitioners

and expressed disappointment with the process from the Senator's point of view. She discussed the frustration of the petitioners and the length of time since the petition was filed, as well as events throughout the process that have called into question the accuracy of the outcome. She added they would provide a more formal, written statement to the Board following the meeting.

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Dr. Ziemer summarized that the motion before the Board is a motion to support the NIOSH position that dose can be reconstructed with sufficient accuracy, and the motion was open for discussion.

Discussion Points:

- Did the SC&A report actually get to the petitioner;
- A lengthy discussion on the concern regarding whether something may have happened before 1948 that wouldn't be reflected in the period from '48 forward as a result of an interview with a worker during an outreach meeting at the Chapman Valve site about manifolds being shipped by rail possibly from Oak Ridge, off-loaded at the Chapman site and then transported by truck elsewhere; whether that would entail a designation of a different facility and how that might affect the Building 23 designation specific to this SEC petition;
- The responses to inquiries made by NIOSH to DOE and DOL as to how they will address the possibility of a different facility being at Dean Street;
- Discussion about the number of completed cases from Chapman Valve.

Dr. Poston observed that, while he respected his colleagues, when the working group made the recommendation it was unanimous, and the record will show there was an indication that there was no belief the slightly enriched uranium-235 had anything to do with this case. He expressed confusion that some members of the group seem to now see a big roadblock to what had been their unanimous decision.

There is nothing to prevent an additional petition from being filed if any evidence presents itself or is uncovered indicating any activities prior to this time that should be the topic of either an SEC petition or further investigation. The fact that some other time period may have been involved does not appear to be a valid basis for failing to move on this particular petition.

A motion was made and seconded to retable the motion until the next meeting of the Board to allow for a report from DOL and DOE on their evaluation of the covered period and covered facility for the site.

A motion to table is not debatable, and the motion failed by a vote of five to six.

*** * ***

The Board returned to the main motion that the Board support the position of NIOSH on the Chapman Valve petition.

The motion carried by a vote of six to five.

Dr. Ziemer indicated he would prepare a letter to the Secretary indicating their recommendation that the petition be denied.

*** * * * ***

BOARD PROCEDURES

Dr. Wade reminded the Board that their typical process is that a draft of a motion would be prepared and addressed during the working session the following day. **Dr. Ziemer** suggested the workgroup chair provide that language.

Dr. Wade, speaking as DFO, noted that close votes create difficulty for the Secretary, although it doesn't mean they're not appropriate. He thought it was important that be avoided where possible, but there are always competing issues between desire to complete work in a timely way, but with equal pressure to do a complete job. A new wrinkle is that the work that needs to be done in order for the Board to feel satisfied is not work that can be done by HHS, but rather is work that is required to be done by another agency. The question is what to do. **Dr. Wade** made a preliminary proposal that the Board consider at the end of each Board meeting he would prepare a letter to a contact point in DOL and DOE identifying issues the Board would like to see discussed at the subsequent meeting, providing them a time certain for the discussion. He noted there was nothing binding in what he might ask for and that it might not take place, but he didn't want the Board to find itself in a situation where they were expecting something and then realize it's not been forthcoming. The best staff work possible has to be done to avoid the issue.

Discussion of Dr. Wade's proposal ensued.

Discussion Points:

- An action list is the most direct and simple tool to be used in this type circumstance because it is specific;
- An action list might be useful for all activities since some things can slip through the cracks;
- It could be expanded to include agencies, contractors, workgroups or individuals and can be followed up and formalized at the next meeting;
- Items can be added to the list as directed by the Board;
- Action lists have been tried before and they only last a couple of meetings and then disappear;
- A contention that it is the intention on the part of "the agency" to slow down the Board's process and slow down anybody who may disagree with their actions and decisions;

- A discussion about whether such a suggestion would be more effective coming from the Secretary of HHS to the Secretaries of Labor and Energy.

It was agreed it was the sense of the Board that **Dr. Wade** would develop an action list, to be distributed and updated at each meeting, to assure that actions have occurred on the previous meeting's action list. Actions have to be tracked to be effective, and that's a staff support issue.

After discussion, **Dr. Ziemer** indicated that it seemed to be the consensus of the Board that a follow-up from DOL and DOE is warranted on the Chapman Valve issue. A clarifying discussion on which part of the question fell under the purview of which agency followed.

Further Discussion Points:

- What could be included on the action list;
- Why DOL has not been present for the entire meeting;
- Why no one from DOE has been present at all;
- Discussion of dates on the Chapman Valve petition, specifically the residual contamination period;
- Discussion surrounding the configuration of the action item list.

*** * * * ***

FUTURE SCHEDULES

A discussion was held related to the Board's schedule. The next face-to-face meeting is scheduled for October 3, 4 and 5, with a Board call scheduled for September 4. **Ms. Laurie Ishak-Breyer** reported she had received requests from NUMEC petitioners, suggesting Pittsburgh to satisfy those requests. Hanford petitioners several months ago asked that a follow-up meeting be in Richland again, if possible. **Dr. Wade** had received a request for an Illinois venue, following up on a number of the Illinois sites. The Nevada Test Site was another request.

It was agreed that a final decision will be delayed until the following day, after some additional updates have been presented.

*** * * * ***

BETHLEHEM STEEL SEC PETITION

Dr. Ziemer reminded the Board that the NIOSH evaluation report had been presented at the May meeting, during which a question was raised on the use of surrogate data. The Board had wished to learn from counsel about the agency interpretation of the use of surrogate data and held off on any motions or actions on the petition, deferring it to today's meeting. **Dr. Ziemer** asked NIOSH if they had any general comments on their evaluation report, and then there would be an opportunity for the petitioners

and Congressional representatives to address the assembly.

* * *

NIOSH Update

Dr. Neton, speaking on behalf of NIOSH, indicated he didn't have a lot to add. The evaluation report had been presented in May by **Dr. Sam Glover** in an extensive presentation that spoke about the rolling operations there between '49 and '52. There was a detailed reported on how NIOSH prepared the dose reconstructions and how they had interacted a good bit with the Advisory Board and SC&A on documenting the NIOSH process and reviewing the scientific validity and accuracy of those DRs. The NIOSH conclusion was that dose reconstructions could be completed with sufficient accuracy for the facility, and recommended that the petition be denied.

* * *

Petitioner Response

Serious problems with audio and telephone connection prohibited the petitioner, **Mr. Ed Walker**, from making comment in that he couldn't hear what had been said before, and he preferred to be able to respond to what he had heard NIOSH give as its most recent comments.

* * *

Congressional Comments

Mr. Jason Broehm from the CDC Washington office read into the record a letter from **Senator Charles Schumer** to the Advisory Board discussing the Bethlehem Steel mill, the workers, their contributions, the purpose of the Special Exposure Cohort, surrogate data from Simonds Saw and Steel, and urging the granting of the Bethlehem Steel SEC petition as quickly as possible.

* * *

Board Discussion

Since the petitioner was still unable to hear anything taking place in the meeting, the Board proceeded with its discussion of the petition evaluation report while efforts continued to clear up the technical difficulties.

Discussion Points:

- Use of surrogate data from other sites with no criteria having been developed that evaluates when such would be appropriate;
- That issue was struggled with in depth some time back, along with the contractor, as

to applicability and appropriateness of surrogate data, with the Board concluding that the surrogate data in the Bethlehem Steel case did fairly bound doses for Bethlehem Steel workers because of both comparison of parameters and intercomparison where there were datapoints for Bethlehem to cross-validate;

- That was a big issue as the site profile was reviewed and was a primary question;
- Recollection that the earlier discussion on Bethlehem Steel was prior to the SEC regulations having been implemented and the Board was operating without that information;
- Clarification that the Bethlehem Steel site profile was reviewed after the SEC rules were in place;
- Clarification that the Board's charter requires them, in part, to advise the Secretary on whether there is a class of employees at any DOE facility who was exposed to radiation but for whom it is not feasible to estimate their radiation dose, so there is a difference between the task relative to dose reconstructions (scientific validity and quality), and SEC petitions (requiring comment on whether it is feasible to estimate the radiation dose);
- Much of the Bethlehem Steel work was done under the mantle of addressing dose reconstruction;
- The Board has struggled with the absence of a good definition of "sufficient accuracy" or criteria for sufficient accuracy;
- The Board approved a set of very sketchy regulations on the dose reconstruction issue in order that there be some framework for NIOSH to proceed with DRs in the early days of the program;
- An observation that a good argument can be made for examining conditions and parameters under which data from one site can be said to be applicable to another site;
- Confirmation that SC&A was never formally requested to review the evaluation report;
- Discussion of whether SC&A has done any reviews where other facilities were used as the surrogate for exposures;
- There's not an issue of ignoring data from other facilities, the question is how to utilize it for dose reconstruction and how it would be utilized in the context of SEC petitions.

*** * ***

Petitioner Response

Mr. Ed Walker indicated that he had heard a portion of the previous conversation and would like to comment. He understood there had been a discussion comparing facilities with similarities to Bethlehem Steel and noted that it was state-of-the-art in its time, no other facility in the world coming close to doing that procedure, so there are no similarities. The size of the facility was not comparable to Simonds Saw. **Mr. Walker** enumerated and elaborated on a number of differences in the two facilities, adding that he didn't see there were any similar procedures done between the two. He commented he didn't see how you could compare a state-of-the-art-facility with any other facility in the world.

* * *

Discussion Points (continued):

- Discussion of 1948 data from Simonds Saw and Steel being used to reconstruct inhalation exposures at Bethlehem Steel in 1948, '49 and '50, prior to installing ventilation at Simonds Saw and Steel;
- A proposal that a working group be established to work with SC&A and NIOSH to examine the issue of data from other sources;
- Ask the contractor to work with NIOSH to identify procedures and the workgroup evaluate that, then come back to the Board with recommendations on how to proceed;
- Clarification as to whether that would be a generic evaluation or one that is specific to Bethlehem Steel, with an observation that Bethlehem Steel itself was evaluated over a period of a year and a half between SC&A, NIOSH and the Board;
- Clarification from the DFO that it would not be inappropriate for the Board to ask SC&A to bundle all procedures that deal with this question and look at it within a certain light or against a certain question, if those are the kinds of procedures being referred to;
- Clarification whether it is implied or explicit in the proposal being discussed that action on the petition evaluation report would be deferred to a later date;
- Discussion of how this particular kind of procedures review fits into what is already being done with the overall procedures review;
- Discussion about whether using comparison populations to do dose reconstruction will filter through the whole system;
- If there's some general agreement that this could be a way forward, a motion could be written up for consideration that would include a more specific charge for a workgroup, something more definite to which people could react.

* * *

Additional Petitioner Response

Mr. Walker again spoke, noting that he had not been able to hear what had been discussed, but offering some comments on the Technical Basis Document for Bethlehem Steel and the rolling processes, lost records and the difference between natural uranium and how it was indicated in the TBD.

* * *

Additional Congressional Comment

Mr. Broehm indicated he had just received a statement by e-mail from **Mr. Dan Utech** from **Senator Clinton**'s office, who was on the telephone and experiencing the same difficulties as everyone else, so he had asked **Mr. Broehm** to read a statement on behalf of **Senator Hillary Rodham Clinton** in support of the SEC status for Bethlehem

Steel workers. Her statement urged approval of the petition.

* * *

Dr. Sam Glover added he wanted to make sure the Board understood some of the information **Mr. Walker** just provided in the uranium discussion, noting that Simonds Saw was the primary rolling contractor for Hanford, and Bethlehem Steel rolled a very small fraction of the finished uranium. They did not finish-roll the entire feed stock for the DOE.

* * *

Continued Board Discussion

A trial motion was made that the Board delay consideration of the Bethlehem Steel SEC evaluation review pending a report from a newly-established workgroup that would evaluate the use of NIOSH procedures involving the use of surrogate data from other sources for dose reconstruction. It agreed that before the Board acted on the motion they would get the exact wording, probably the following day, but additional discussion would be held at this time.

Discussion Points:

- An observation that there are many times when using surrogate data makes sense and is a scientifically valid approach to doing dose reconstruction;
- These are site-dependent situations and so generic that it doesn't seem that establishing a workgroup, unless they're going to do all the site evaluations, makes any sense;
- Concern about how the process could be worded in a way specific enough to be of any value to a unique SEC or group, yet broad enough to be realistic;
- A lot of work has been done on Bethlehem Steel, with a lot of testimony heard and a great deal of scrutiny given to the issues. The issues being discussed now were discussed in detail at that time;
- It's worthwhile to have a working group look at how surrogate data can be used, but the Bethlehem Steel issue was carried as far as it could be at this point in time.

* * *

Dr. Ziemer indicated he had sensed a concern that the Board perhaps think about separating Bethlehem Steel from the action of workgroup investigation of the more generic use of surrogate data. Discussion ensued as to whether the motions should be separate or tied together, as well as the effects of denying a petition and then having to redo it following the workgroup investigation.

Dr. Ziemer outlined Board options and the result of a vote on various options.

Without objection the Board agreed to return the issue to the agenda the following day for formal action once the precise wording on the motion is available.

* * * * *

BLOCKSON CHEMICAL SEC PETITION

Dr. Ziemer reminded the Board there had been a presentation on this petition earlier. Additional information came to light and NIOSH pulled their evaluation report, in effect taking it off the Board's agenda and the Board was never able to take action. There is now a revised evaluation report.

Dr. Jim Neton reported on SEC evaluation report number 00058, originally presented by **Dr. Brant Ulsh** in December of 2006. As mentioned, the report had been withdrawn after NIOSH realized that not all the covered exposure had been dealt with properly in the site profile.

Dr. Neton discussed the uranium extraction at the phosphate plant, Building 55 operations and the related activities. Diagrams were provided showing the uranium separations from the phosphate rock, and then moved into a site history, beginning with laboratory studies on uranium recovery in March of 1951; pilot plant construction, Building 55 construction, operations startups through the contract and production ending time of March 1962.

The petition qualification time line covered receipt of the petition in March of 2006 and spoke to various workers employed October 10, 1952 through October 31, 1962 and which qualified for evaluation. A later petition for various workers employed January 1951 through December 31, 1962 arrived in August of 2006 and qualified for evaluation. At the end of August the two petitions were merged to form one petition for various workers employed January 1, 1951 through December 31, 1962. The initial class covered all AWE employees, contractors and subcontractors who worked in Building 55 at the Blockson Chemical Company from January 1, 1951 to December 31, 1962. The expanded class covered all AWE personnel who worked on activities related to the production of uranium at Blockson Chemical Company from January 1, 1951 to December 31, 1962.

The petition bases were that there was no monitoring of worker exposure, particle size was not claimant favorable, inhalation to ingestion pathway was not considered, and uranium daughters were not considered.

Dr. Neton described the information available to NIOSH for dose reconstruction, which included the site research database, information from petitioners, interviews, outreach meetings and numerous studies of the phosphate industry. He elaborated on the information provided through the site research database, including contract information, chemical processes, production data, bioassay, radiological data and various AEC documents and memos. Also explained by **Dr. Neton** was some of the information provided through worker interviews and the information gleaned from phosphate industry studies.

Addressing each of the concerns in the petition, **Dr. Neton** explained what had been revealed by the NIOSH evaluation and how NIOSH addressed each of those concerns. He further explained that NIOSH had revised the site profile and issued a revision to the evaluation report on July 3, 2007. He discussed the revisions, noting they included information received from additional data capture activities and from former workers, an evaluation of potential dose received outside of Building 55 operations, the potential for exposure to various progeny in the uranium and thorium series, and revised the radon exposure values.

Turning to dose reconstruction, **Dr. Neton** explained the dose calculation approaches for external dose and internal dose. He described the status of Blockson claims, with 111 cases meeting the class definition and 102 completed dose reconstructions.

Dr. Neton reiterated the evaluation process in which the two-pronged test asks the questions relative to feasibility to estimate radiation doses of individual members of the class with sufficient accuracy and, if revealed such is not feasible, then the additional question of a reasonable likelihood that such radiation dose may have endangered the health of members of the class. The NIOSH conclusion explained by **Dr. Neton** is that the monitoring records, process descriptions and source term data are sufficient to estimate radiation doses with sufficient accuracy for this class of employee, and that dose reconstruction is feasible for internal exposures from uranium and its progeny, thorium and its progeny, and radon, external beta/gamma exposures and occupational medical X-rays. With the answer to the feasibility question being that it is feasible to reconstruct dose, the question of health endangerment is not applicable.

*** * ***

Workgroup Report

As chairman of the workgroup charged with overseeing the issues brought forward in this petition, **Ms. Wanda Munn** indicated that SC&A and NIOSH have done an admirable of addressing each of the issues and have done so very carefully. She noted the two basic questions were: Are the adequate number of issues being addressed; and were the questions about thorium incorporated properly. They observed they seemed to have been addressed, and called on **Dr. John Mauro** from SC&A to comment.

Dr. Mauro agreed, noting that two areas might be looked at further. One involves the assumption that the uranium inhaled from the yellowcake is type M. In the NIOSH report the thorium-230 was addressed and assumed that it tracks the uranium and ends up in the can with it. SC&A's independent chemists tracked where they believed the thorium would end up and it is not immediately apparent that it would necessarily follow the uranium. Those comments are in the report delivered to the Board.

*** * ***

Discussion Points:

- It was hoped these technical issues might have been resolved before the Board made its final decision, although it seems resolution is not far off;
- Type M or S is not an SEC-related issue;
- NIOSH stands by its belief that uranium is more similar to thorium and that it follows through the process, but is willing to discuss various opinions and come to some agreement;
- How was the eventual decision made that exposures in the balance of the plant were covered exposures.

*** * ***

Petitioner Response

Mr. Dennis Kellogg indicated it was difficult for him to hear the Board's discussions but commented the petitioners would challenge the concept that this is appropriate for dose reconstruction, and offered four or five arguments. He indicated his understanding of production was from some USA Today articles which were offered production figures considerably higher than those suggested by NIOSH, and he felt the radon levels were not addressed properly or in a way that was meaningful. He asked to postpone a decision in order to clarify the discrepancy in production and to have a focused review of the radon issue.

Ms. Cathy Pencetti agreed with **Mr. Kellogg** and discussed the use of words such as "estimates," "assumptions," et cetera. She indicated it was similar to the Bethlehem Steel situation and she felt the work hours were very inaccurate.

Mrs. Gertrude Martin, speaking on behalf of [Identifying information redacted], questioned whether the 102 DR cases that have been completed would be re-evaluated in light of the new information included in the revised site profile.

Mrs. Mary Walsh spoke on behalf of [Identifying information redacted] and described the shift work, commenting she didn't think records were kept the way they are now.

Mrs. Monica Mack indicated [Identifying information redacted] had been an electrician and would be called in at all hours on emergencies. The issue of eight-hour shifts was addressed by **Mr. Tom Tomes** from NIOSH and discussed with **Mrs. Mack.**

*** * ***

A motion was made and seconded that the Board postpone final deliberation on the Blockson SEC petition until the workgroup had an opportunity to meet, with the expectation that a recommendation will be brought to the Board at the October meeting.

With no responses to a request for discussion, the motion carried by unanimous vote.

* * *

After discussion it was agreed that the workgroup would meet at 10:00 a.m. on August 28 in Cincinnati, Ohio, with opportunity for petitioners and interested workers to participate by telephone.

* * * * *

TIMELINESS DISCUSSION

Dr. Wade made the observation that the pressures of timely versus complete versus accurate versus fair versus uniform are constants and need to be discussed periodically. He indicated he had asked **Ms. Emily Howell** from the Office of the General Counsel of HHS to refresh the assembly as to where the word "timely" appears in the governing documents.

Ms. Howell reported that she had gone through and found various places in the Act and regulations, as well as the Executive Order, where the issue of timeliness is discussed. She provided the citations and read those portions into the record. She noted timeliness also appears throughout the discussion in the preambles to both the dose reconstruction and Special Exposure Cohort rules.

Dr. Ziemer observed that since a definition doesn't actually appear, "timeliness" in the regulation is in the eye of the beholder. **Ms. Howell** agreed that, though there are other deadlines associated with the program, timeliness itself is a general value.

Dr. Wade added that it was obvious that "timely," as opposed to or in competition with fair, uniform, compassionate and consistent, is an issue the Board faces. It needs to be discussed periodically and applies not only to the Board but to NIOSH, DOE and DOL. This is raised just to give the Board members something to think about and there will be time spent discussing it tomorrow.

Mr. Griffon remarked that thoroughness and completeness also run up against the question of timeliness.

* * * * *

AMES LABORATORY SEC PETITION

NIOSH Evaluation Report

Mr. LaVon B. Rutherford, SEC health physics team leader, provided a time line on petition-related activities, noting the receipt date of October 26, 2006; qualification on January 30, 2007; and issuance of the evaluation report on May 11, 2007.

Mr. Rutherford described the proposed SEC class, noting that it was submitted on behalf of a class of employees with an initial class definition of sheet metal workers, physical plant maintenance and associated support staff, and supervisory staff who may have been exposed to the maintenance and renovation activities of the thorium production areas in Wilhelm Hall at the Ames Laboratory for the time period from January 1, 1955 through December 31, 1970. He noted there are eight claims in the NIOSH Claims Tracking System that would be part of the class.

Mr. Rutherford explained that thorium production work in Wilhelm Hall started in 1949 and ended in 1953. Radiological operations involving the proposed class occurred from 1955 through 1970 and included maintenance and renovation activities in the former thorium and uranium production facilities.

A listing of available information sources and types of occupational exposures was provided by **Mr. Rutherford** within the class, the sorts of activities during which radiological exposures could have occurred. Also discussed was the availability of dosimetry data, both external and internal, as well as the monitoring program at Ames Laboratory.

Mr. Rutherford noted that no external monitoring data are available for existing claimants within the class. Available internal monitoring data included thorium and tritium bioassay data, though no internal monitoring data are available for existing claimants within the class.

The evaluation process was reiterated by **Mr. Rutherford**, including the two-pronged test which is always a part of the process. Addressing feasibility, **Mr. Rutherford** explained that NIOSH found the available monitoring records, process description and source term data are insufficient to complete dose reconstructions for the proposed class of employees, and that NIOSH currently lacks access to sufficient information to estimate the internal dose from thorium. NIOSH also found the available internal monitoring data, process description and source term data are sufficient to reconstruct occupational internal doses from other radionuclides, adding that exposures from renovation and remediation activities in Wilhelm Hall are dominated by thorium and its progeny. **Mr. Rutherford** explained the site profile provides methodology for determining internal exposure for other radionuclides from other activities at Ames Laboratory.

As to the external monitoring, **Mr. Rutherford** reported NIOSH found the available data, process descriptions and source term data are sufficient to reconstruct occupation beta and gamma exposures, including medical X-rays.

Addressing the health endangerment issue, NIOSH has determined that it is not feasible to complete dose reconstructions with sufficient accuracy and that the health of the employees covered may have been endangered. Evidence reviewed indicates workers in the class received chronic internal and external exposure from remediation and renovation of the former thorium production facilities.

Mr. Rutherford provided a recommended class definition that was more comprehensive

than the original, which was for: Sheet metal workers and physical plant maintenance and associated support staff who were monitored or should have been monitored for potential internal radiation exposure associated with the maintenance and renovation activities of the thorium production areas in Wilhelm Hall (a.k.a. the Metallurgy Building or "Old" Metallurgy Building) at the Ames Laboratory for the time period from January 1, 1955 to December 31, 1970, and who were employed for a number of work days aggregating at least 250 work days, either solely under this employment or in combination with work days within the parameters established for other classes of employees included in the SEC.

The feasibility findings for SEC-00075 were summarized by **Mr. Rutherford**, noting that dose reconstruction is not feasible for internal exposures to thorium-232 and its progeny, but is feasible for non-thorium internal exposures; and external exposures to beta/gamma, neutron and occupational medical X-ray. Citing the NIOSH recommendation, **Mr. Rutherford** reiterated for the period January 1, 1955 through December 31, 1970 NIOSH finds that radiation dose estimates for thorium-232 and its progeny cannot be reconstructed for compensation purposes, and that the health of employees in the class may have been endangered.

*** * ***

Discussion Points:

- The dosimetry program at Ames and the various vendors or suppliers of film badges;
- A question of how the people will be identified and whether NIOSH has considered how many people the class definition likely covers;
- Why were sheet metal workers specifically separated out; they would be included under all maintenance and shop personnel.

*** * ***

Petitioner Response

Dr. Laurence Fuortes indicated he had nothing to add, explaining that the petition had tried to be relatively narrow in applying a population at significant risk. He explained **Mr. Bob Staggs** could better discuss that issue.

*** * ***

Mr. Staggs discussed the activities at the time and why so much of the work fell to the sheet metal workers. While other trades were involved in the renovation, after the sheet metal workers finished their tasks most of the dirty work had been accomplished.

*** * ***

Mr. Rutherford commented that the class definition was shared with the Department of

Labor and they indicated they could administer the class.

A motion was made and seconded that the Board accept the NIOSH evaluation and make a recommendation to the Secretary of Health and Human Services that this petition be approved.

By friendly amendment, the language of the standard letter was read into the record, a copy of which is attached and incorporated herein by reference.

The motion was open for discussion, which centered primarily around minor clarifications.

The motion carried by unanimous vote.

It was noted that a written copy of the motion will be provided during the following day's business.

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TIMELINESS ISSUE (Continued)

Dr. Wade observed that, when he thinks of this issue, a thing that occurs to him most frequently is that the Board or a workgroup will have an issue, but to take that issue to 100 percent closure can take a very long time and a great deal of resources. Yet to take it to anything less than 100 percent closure is unacceptable to some. This creates the tension as far as completeness versus timeliness. He remarked he believes the Board should have a discussion on the issue and begin to establish some understanding and what it means. He noted the Board has to decide how thick its skin is with regard to charges about its not being timely or complete, and there may be no right answer to that question.

Discussion Points:

- An opportunity at each meeting to review and make sure subsequent meetings are planned to make as good use of the time as possible;
- Perhaps a master status sheet to review at each meeting on what's happening at all the sites on the list, when things are expected to be completed at each of the sites, and perhaps establish some tentative timetables;
- An observation that when contemplating how such a list would appear, requiring not just periodic updates but continual updates, it may require the institution of an additional branch of government;
- A frustrating issue with respect to timeliness is the issue of priorities, because everything appears to be urgent and requiring immediate attention;
- If there are people available who can say one facility's workers are less important than another, it would be good to hear from them at some point;
- Suggestion that the status report and action item list could be combined.

Dr. Wade agreed that he would make every effort to bring a master schedule for the next Board meeting, although he wasn't sure he would be able to bring full detail on the list.

Additional Discussion Points:

- Perhaps another subcommittee should be established;
- Board members have to recognize they may not be able to be as involved in every issue as they would like, but rather will have to defer some actions to a subcommittee;
- Another tension is that the Board wants to consider issues and sometimes redo the work of the subcommittee or a workgroup;
- Establishing some endpoint dates may be valuable because it goes to the issue of when something is 100 percent complete;
- At some point a decision has to be made based on the information at hand;
- An observation that certain issue such as data integrity and other radionuclides are going to come up on almost every SEC petition, and somehow the Board needs to find a way to better address those issues before an evaluation report is out;
- The regulations have established certain hurdles, one of which is information, and then the Board adds on additional hurdles such as proof of process, which is needed but is not a hurdle for the original evaluation report;
- NIOSH evaluates the petition and prepares its evaluation report working against a timetable, a deadline, and they typically evaluate issues identified by the petitioner and issues they know are on their plate at the time;
- When the petition moves to the working group and SC&A, other issues become identified that were not directly evaluated within the NIOSH report;
- An observation that perhaps the Board has been overly optimistic as to how long some of the tasks assigned to workgroups or the contractor, or NIOSH, will actually take to complete;
- An observation that the review by the workgroup to be set up to look at surrogate information could be a very long involved process and the Board might need to consider how long it will delay the Bethlehem Steel decision.

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PUBLIC COMMENT SESSION

Dr. Ziemer reminded the assembly that the Advisory Board is not part of DOE, DOL or HHS, but is an independent board appointed by the President to oversee the work of NIOSH as they carry out their part of the compensation program.

Public comment was solicited on the first two days of the meeting. The following is a list of the members of the public who spoke on this day. A full transcript of their comments is available on the NIOSH/OCAS web site, www.cdc.gov/niosh/ocas.

Ms. Mary Ann Carrico; Ms. Rosemary Hoyt; Dr. Dan McKeel; Mr. John Ramspott; Ms. Faye Vlieger, former Hanford worker; Ms. Gai Oglesbee (reading the statement of Ms.

Roberta Montgomery, claimant); Mr. Pete Marsh, Central Washington Building Trades Council; Mr. Richard Barker, claimant; Mr. Randall R. Gosseen, Local 598, survivor; Mr. Chris Janos, claimant representative; Ms. Terrie Barrie, ANWAG; Mr. Charles Driver, former Paducah worker; Mr. George Valdez, survivor; Mr. Richard Dengate, retired General Telephone employee (Hanford subcontractor); Ms. Gai Oglesbee, claimant; Ms. Joanie Fiering, Portsmouth, claimant; Ms. Julie Trudeau, survivor; Ms. Vina Colley, Portsmouth, claimant.

* * * * *

With no further comments, the Board officially recessed until 8:30 a.m.

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Thursday, July 19, 2007

The third day of the meeting was called to order by Board Chairman **Dr. Paul Ziemer**, who made his usual reminders to register attendance. He also commented that the order of issues on the agenda were likely to change due to availability of Board members at various times since it is the last day of the meeting and people could have to leave in order to make their flights home.

Dr. Ziemer noted there was one issue to address before getting into the agenda, and related to the Board voting procedure. Put in place very early was a procedure on how to deal with votes of members who are absent when a vote is taken on substantive issues such as an SEC petition. He noted two members were not present yesterday, although one was available by phone and able to vote. **Dr. Ziemer** asked to have the Board's rule on voting read, just for information for the assembly. The procedures were adopted by the Board in January of 2002 and are available on the web site on the Advisory Board page. The document covers three issues -- definition of quorum, voting issues, and subcommittees and working groups. The portion on recommendations was read into the record, indicating that reasonable effort shall be made to obtain the vote from any member who may not be able to be present, telephonically or physically, for a particular vote.

Dr. Ziemer observed that the effect of the rule is that an attempt would be made to obtain the vote of **Mr. Clawson**, and that until that vote was acquired, the action taken by the Board on Chapman Valve is not completely closed. He explained the two possibilities are that if **Mr. Clawson** voted for the motion the action would stand. If he voted against the motion there would essentially be a deadlock; it would be a six-six tie and would mean that there would not be a recommendation to make to the Secretary because it would not have reached closure. It would have the effect of keeping the action open until the tie could be broken one way or the other.

Dr. Wade commented that in the past he and **Dr. Ziemer** had contacted a Board member when they had to leave a discussion part-way through. He proposed that a transcript of the discussion on the Chapman Valve issue be provided to **Mr. Clawson** to read, and that he and **Dr. Ziemer** would have a discussion with **Mr. Clawson**, during which they

would attempt to solicit his action.

Discussion Points:

- Perhaps initially an inquiry should be made as to what information the absent Board member thinks would be necessary for them to reach a decision on a vote;
- Perhaps a transcript wouldn't be required, which would save some degree of time in reaching a final vote;
- Discussion on whether this would be a retroactive procedure in that in the past there were several substantial votes taken when Board members were absent and votes were not solicited from those members;
- This only becomes an issue when the vote is so close that an absent Board member's vote could have a deciding effect on the final outcome;
- The specific language is that the Board shall issue recommendations to HHS on specific matters, which would indicate that it's those larger matters that would be controlled by this specific procedure;
- Even though an absent member's vote may not change the outcome, effort should be made to obtain the vote because some Board members may want to at least have their vote on the record;
- It would be helpful if the votes of the absent Board members were made available to the other Board members.

It was agreed that **Drs. Wade** and **Ziemer** would contact **Mr. Clawson**, provide him with whatever information he needs to inform himself on the issues, with transcripts if he so desires, and then record his vote. Depending on that vote, they would move forward as appropriate.

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SC&A CONTRACT CONSIDERATION

Dr. Wade commented he had provided each Board member a copy of an e-mail sent in the past week summarizing the issues. He described generally that the Board is about to enter another fiscal year with SC&A and there needs to be a decision on what contract tasks to have in place for that fiscal year. He discussed the funding available, and explained that, in accordance with the Board's instructions, he and **Mr. David Staudt**, the contracting officer, had solicited proposals from SC&A for the normal tasks. Those proposals have been received and shared with Board members.

Dr. Wade enumerated each task, briefly describing what it entailed and the budget for each task, as well as a proposal total. He noted the total was in excess of the amount available and discussed some ways in which individual task amounts could be reduced. **Dr. Wade** observed there needs to be a bit of thinking on how to proceed, and suggested some prioritizing might be in order in terms of what tasks are moved forward, although the Board may choose to do something else.

Drs. Ziemer and **Mauro** described each of the tasks individually and the work that had

been done under the contract to date, as well as what the Board might want to do in the future. They discussed how the various tasks might be modified to fit the budget, levels of effort required in the tasks, Board time and the backlog.

A motion was made and seconded to approve the proposed tasks and budgets as modified in the Board discussions.

The motion carried unanimously.

Dr. Wade commented that, in accordance with the procedures, he will not attempt to secure **Mr. Clawson**'s vote on this motion because it is not a recommendation to the Secretary.

An observation and objection was made relative to one member of the contractor's staff, noting that the contractor was selected to provide the Board with technical support but that individual is not technically qualified. The objection to his activities relative to the Board was once again raised. Other Board members spoke on behalf of the individual, who was not named, and **Dr. Wade** agreed to discuss the issue with the contracting officer and let the Board know if a decision was made to take any action on the issue.

Dr. Wade also noted that next year will be the fifth year of the SC&A five-year contract, and he has planned to ask **Mr. Staudt** to come before the Board at the next meeting to discuss a path forward for continuing the services of a Board contractor.

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HANFORD SEC PETITION

Dr. Wade announced that two conflicted Board members, **Ms. Wanda Munn** and **Ms. Josie Beach**, had stepped away from the table and would remain seated in the audience during the process of dealing with the SEC petition.

Dr. Ziemer acknowledged the presence of **Ms. Kristen Eby** from **Senator Maria Cantwell**'s staff; **Ms. Rebecca Thornton**, representing **Senator Patty Murray**'s staff; and **Ms. Dixie Duncan**, representing **Congressman Doc Hastings**' staff. He welcomed them all and afforded an opportunity for **Ms. Eby** to read a statement from **Senator Cantwell**. The statement discussed the NIOSH evaluation report, how long Hanford workers and their families had waited for compensation, and urged consideration of the post-1946 years of the petition.

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NIOSH SEC Petition Evaluation Report, Part I

Dr. Sam Glover provided a petition overview, noting that three separate petitions had qualified under the process, and gave information on those various procedures, noting that the three were merged into two. This ultimately resulted in Part I, which

covers the period 1942 to September of 1946; and Part II, which covers September 1, 1946 to 1990. He noted this presentation reports the conclusions on Part I and was issued on May 15, 2007. The evaluation report for Part II is to be issued in early September.

Petition number SEC-00057 qualified on the basis that personal monitoring data gaps existed for several of the individual workers listed in the petition. Through the qualifying process NIOSH identified some pre-1946 operational periods for which no internal exposure monitoring was performed.

Petition SEC-00050 was qualified based on being completed encompassed by Petition SEC-00057.

Petition SEC-00078 is outside the time period for Part I and will be discussed in a subsequent presentation.

The class for Part I was defined as all employees in all facilities and areas of the Hanford Nuclear Reservation from January 1, 1942 through December 31, 1946, and is the class that was evaluated in the NIOSH report.

The sources of available information for the NIOSH evaluation were enumerated and discussed by **Dr. Glover**. They included the site profile and the individual Technical Basis Documents, along with a number of Technical Information Bulletins; interviews with former workers and site experts, including worker outreach meetings and notes from telephone interviews. Other information included the site research database, with over 670 documents having been identified and reviewed for relevance for the time period. Additional documentation from DOE included logbooks. Also available was documentation and affidavits submitted by the petitioners. The CEDR and Hanford Radiological Exposure (REX) databases were searched for available internal and external monitoring data.

Also included in **Dr. Glover**'s discussion was the availability of dosimetry data, which indicated 378 cases meeting the class definition with 328 dose reconstructions completed; 49 cases contained internal dosimetry and 244 contained external dosimetry. Attention was called to the fact that the bioassay program was considered developmental until August of 1946, which explained the low number of internal dosimetry records.

The Computer Assisted Telephone Interview provided work location, work hours and hazards or incidents encountered.

A discussion of the internal monitoring information was provided by **Dr. Glover**, noting that a routine plutonium bioassay program was started in September of 1946, and the uranium urinalysis program piloted in 1946 but was not suitable for use until 1948. Fission product urinalysis started in January of '47 but considered unreliable until 1948. This information was therefore not available for the time period in question.

Thyroid scans were conducted for workers in the separations canyons, whole body counting methods were not used until the late 1950s, and air sampling was conducted but difficult to relate to worker exposure.

Addressing external monitoring, **Dr. Glover** reported dosimeters were assigned to all workers who entered the controlled radiation areas. He also discussed photon exposures and the use of Pencil Ionization Chambers (PICs) and film dosimeters, as well as neutron monitoring. **Dr. Glover** provided a sample of a 1946 monthly monitoring report. Other routes of exposure were discussed, including occupational medical X-ray, environmental dose and unmonitored workers.

Dr. Glover addressed the NIOSH evaluation of petition topics, specifically the missing Hanford DuPont area dosimetry records, the claim that methods used to estimate releases were not claimant favorable, and under-recording of neutron dose. Each was discussed individually, explaining the concern and how it was resolved by NIOSH, with the neutron dose concern to be addressed in Part II.

Moving to the feasibility of internal dose reconstructions, **Dr. Glover** indicated that NIOSH had concluded that, based on the absence of bioassay data for the period prior to September 1, 1946, internal dose reconstruction is not feasible, with the exception of those exposures associated with uranium fuel fabrication. The health endangerment determination would therefore be required.

As to feasibility of external dose reconstructions, NIOSH concluded that the recorded external dosimetry photon data are extensive and sufficient for external dose reconstruction. No health endangerment determination is required.

In the summary of feasibility findings for the Hanford SEC Petition, October 1, 1942 through August 31, 1946, **Dr. Glover** noted that internal dose reconstruction for uranium and the ambient environment was feasible, but dose reconstruction for plutonium and fission products was not feasible. As for external, dose reconstruction was feasible for gamma, beta, ambient environment and occupational medical X-ray exposures, with neutron exposures to be evaluated in Part II.

The recommended class definition was read into the record as: All employees of the DOE or DOE contractors or subcontractors who were monitored, or should have been monitored, for internal radiological exposures while working at the Hanford Engineer Works in: the 300 Area fuel fabrication facilities from October 1, 1943 through August 31, 1946; the 200 Area plutonium separation facilities from November 1, 1944 through August 31, 1946; or the 100 B, D, and F reactor areas from September 1, 1944 through August 31, 1946; and who were employed for at least 250 aggregated work days either solely under their employment or in combination with work days within the parameters established for other SEC classes (excluding aggregate work day requirement).

Dr. Glover indicated additional documentation and sample dose reconstruction scenarios are available for the Advisory Board's review, providing where that information could be found.

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Discussion Points:

- Clarification of the neutron issue;
- Clarification of a conflict in a table in the evaluation report itself and a similar table presented in the slides;
- Clarification of a question relative to uranium internal dose;
- The class definition has been submitted to the DOL, discussed with them and they are comfortable with administering that class;
- Clarification of the 378 claims described by NIOSH as fitting the class definition.

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Petitioner Response

Mr. Tom Folles explained briefly how he became a petitioner for the group under consideration. He discussed the DuPont workers and the lack of information available on them. He enumerated the considerable efforts made to locate those records, discussed the Pacific Northwest Laboratory, described the process used to create the Hanford Mortality Study database.

Mr. Folles spoke about the requests for information through the FOIA office, noting that in his efforts he could only locate documents and had to depend on experts to say what they mean. He cited a study done by **Dr. John Till**'s firm, explaining **Dr. Till** was formerly chairman of the technical steering panel that monitored Battelle when it developed the Hanford environmental dose reconstruction. The study was on particle releases during the period in question.

Mr. Folles cited a variety of correction factors developed by various people, ranging from a correction factor of 100 to a correction factor of 1,000, noting that it was a good example of the lack of fundamental data needed to reconstruct dose for the DuPont Hanford workers. He also mentioned that the central thrust of his points made in support of the petition concerns only the internal exposures.

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Ms. Rosemary Hoyt commented that she was the petitioner on SEC-00057, which covered the period 1942 to 1990, and questioned that **Mr. Folles** is the primary petitioner and didn't understand why the Board would say he is. She expressed a concern relative to the time frame and asserted that NIOSH took the easy way out. She also asserted that since the petition had been split into two sections, the 180-day time frame should have been split and applied to each part of the petition for a total of 180 days rather than allowing 180 days for each portion.

Ms. Hoyt expressed her belief that certain databases were flawed, and again

emphasized the time frame and requested the evaluation of Part II be carried out expeditiously.

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Discussion was primarily related to the neutron issue to be addressed in the Part II evaluation.

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> A motion was made and seconded to accept the NIOSH recommendation that the described class from the period October 1, 1943 through August 31, 1946 be added to the Special Exposure Cohort.
>
> **The motion carried unanimously, with two abstentions from the conflicted Board members.**

Dr. Ziemer announced that votes will be gathered from the absent Board members for the record, and written copies of the motion will be available for editorial review later in the day.

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NIOSH commented that at the February Board meeting they had explained that this was such a large time period and there was so much documentation, the most efficient process was to handle the early years with those specific problems, and then complete the evaluation in the later years. A second evaluation was not an attempt to allow themselves 360 days for the evaluation, and confirmed the Part II report can be expected in September.

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AGENCY UPDATES

Dow Madison Petition

Dr. Ziemer made a clarification on an issue raised by the petitioner in public comment about a letter to the Secretary. **Dr. Wade** added that he was aware that the Secretary had received **Dr. Ziemer**'s letter and had sent a response that is making its way through channels in HHS.

Mr. Elliott added that at the conclusion of the May meeting and the discussion about Dow, he had two action items he felt had come to him for follow-up, one of which was to contact the other two Departments to verify their positions on the residual contamination time period and whether they viewed anything brought forward in **Dr. McKeel**'s presentation as being evidence the designation for the Dow facility should be adjusted in any way, either to extend the period or otherwise.

Mr. Elliott commented that he had directed, in his absence, that an e-mail be sent inquiring of both agencies. A response letter came from **Dr. Pat Worthington** at DOE, and **Mr. Elliott** offered his apologies to the petitioner for the response not having been shared. It had been **Mr. Elliott**'s request that such be done and, in a flurry of activity, the ball was simply dropped.

The second action item was to pursue and assess the ability to reconstruct the thorium dose during the residual period. **Mr. Elliott** indicated he had not acted on that and has not expended any resources to do so. He explained that doing so would be illegal in that it was not a covered period, it was not a covered exposure, and until he had the determination from DOE and DOL that it would be covered under the program, he cannot expend resources to do that.

Joining the meeting by telephone were **Dr. Pat Worthington** from the Department of Energy, who was in travel status and could not be physically present. Also on the phone were **Ms. Regina Cano**, **Mr. Joe Lebowski**, **Ms. Libby White** and **Mr. Greg Lewis**, all from DOE. Also joining was **Mr. Jeff Kotsch** from the Department of Labor.

Mr. Kotsch indicated that **Mr. Pete Turcic** had sent a letter to **Dr. McKeel** on May 22nd. **Dr. McKeel** joined the discussion to detail his various communications and indicated that he had shared the responses he had received, expressing his astonishment that OCAS did not share some communications with him.

In response to **Mr. Kotch**'s inquiry whether the petitioner had received their letter, **Dr. McKeel** described a communication he had received, what it talked about, didn't talk about, information he had hoped to receive, and raised again the issue of purchase orders. He commented that he didn't think the letter was an adequate or definitive response to the evidence he had presented to the Board.

Mr. Kotsch and **Dr. McKeel** debated the value of purchase orders that Labor found to be illegible and not a sufficient basis for making a decision on the inclusion of additional time. **Dr. McKeel** contended that the information was visible.

Dr. Ziemer made the observation that this issue is not something in the Board's purview in that they do not mandate what Labor does, and they will have to look at the response from the Secretary to the Board in terms of what can be done next, because that will dictate both what NIOSH can do and in turn what the Board can do on this issue. He did note that it would be helpful to have a more formal response from Labor at some point, up or down.

Dr. Wade suggested that while everybody concerned is available, either in person or by phone, a conversation to determine if the Board could facilitate the types of interactions necessary would be a good step forward. A discussion then ensued among **Dr. Ziemer**, **Mr. Kotsch** for the Labor Department, **Dr. McKeel** on behalf of the petitioners, and **Dr. Worthington** on behalf of the Department of Energy relative to what might be reasonable to request from the DOE and DOL, and what types of responses might be reasonable to expect in return. Issues included time to gather information and research the questions.

Mr. Robert Stephan from **Senator Obama**'s office joined the discussion, remarking that they get back to a debate between worker testimony and an illegible document, and clarification is needed on that question. He indicated the Senator feels DOE needs to supply the petitioners with the information upon which they base their decisions.

Dr. Ziemer asked for direction on whether the Board should spend time on an issue which probably has to be resolved between the petitioners and Labor. **Dr. McKeel** reiterated his argument that it is the province of the Board to act on an expansion of the class for Dow Chemical workers, regardless of what DOE or DOL might do, concluding that there is a discrepancy and logical inconsistency between NIOSH evaluations of thorium exposures for Ames Laboratory during the residual period, yet saying to do the same thing for Dow Chemical was illegal.

Ms. Liz Homoki-Titus from the HHS Office of General Counsel clarified that at the Ames Laboratory thorium was a covered exposure, but in the Dow instance there is an opinion of DOE that thorium is not a covered exposure. That's why it's not looked at.

Dr. Wade again attempted to explain that the issue of covered period is a DOL issue and the issue of a covered facility is a DOE issue, and those determinations need to be made before the Board or NIOSH can take any further action.

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UPDATE ON STATUS OF ROCKY FLATS CASES

Dr. Jim Neton provided the Board with slides updating the NIOSH status on re-evaluation of cases affected by changes made to the Rocky Flats site profile during the SEC deliberations. He reminded the assembly that he had committed, on behalf of NIOSH, to a two-month period to have the cases reviewed and moved forward.

Dr. Neton reported the total number of cases from the Rocky Flats site is 1,249, with 1,111 having required a dose reconstruction; 218 claims are still active and 20 claims have been pulled. From the 1,111 cases, 339 have a probability of causation greater than or equal to 50 percent, with the remainder of 672 less than 50 percent, which makes up the universe of potentially affected cases to be dealt with in implementing or evaluating the changes.

Explaining the four changes made or committed to be made to the site profile, **Dr. Neton** began with exposure to super S plutonium, the insoluble plutonium that provides a larger dose to the lung than regular type S. That issue is outlined in Technical Information Bulletin Number 49 and Program Evaluation Plan Number 12 to deal with those cases on a complex-wide basis. **Dr. Neton** noted that more sites than Rocky Flats were affected by this TIB.

The next two issues were the use of the 95th percentile intakes for unmonitored workers, either prior to or after the D&D period. He noted there were slightly

different distributions. The coworker distribution for the D&D workers is slightly different and fairly new.

The fourth issue had to do with the new neutron dose model for workers between January 1, 1967 and December 31, 1970. That is the period of time in which the Board felt NIOSH could do dose reconstruction for neutrons with sufficient accuracy. That is the very tail end of the NDRP data and represents a fairly small number of cases.

Dr. Neton proceeded to go through each of those issues in detail. Of the 672 Rocky Flats cases with a POC of less than 50 percent, NIOSH has determined 409 are potentially affected by the super S issue, and those cases will have to be reviewed in more depth. It cannot be determined by a superficial scan. Ninety-five of those cases had employment during the SEC period; 40 of those 95 claims have an SEC-covered cancer; and 19 are potentially neutron exposed. Essentially 19 of those 409 cases may possibly be added to the SEC class. **Dr. Neton** cautioned that this does not mean that only 19 cases may be added, but is simply out of the subpopulation he's discussing at the moment.

Dr. Neton concluded that 390 cases have been pulled to be re-evaluated to determine the potential impact of super S, and will be re-evaluated for the other issues as well, and there will be some additional cases that to be pulled to go through the process.

Observing that since the recommendation letter just came from the Board and the SEC class has not yet been added, **Dr. Neton** explained there is a little bit of uncertainty as to which cases ultimately would be pulled by the DOL. NIOSH is being proactive on working through the super S cases.

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Discussion Points:

- How were the 19 claims of neutron-exposed workers determined;
- Is the list of buildings to be included in the definition of "monitored or should have been monitored" available yet;
- Is that lack of availability something that would delay the Secretary's action on the SEC petition;
- The time frame goal for re-evaluation of the 390 cases for super S is to complete those within the two-month period committed to by NIOSH;
- How many re-evaluations are needed for the coworker intake models;
- Has the number of D&D worker cases been assessed yet;
- One member of the Board was not available at the time of the vote on the Rocky Flats SEC petition and, under Board procedures, that vote will be officially obtained and will show up in the final count;
- The official letters to the Secretary relative to Rocky Flats went out 21 days after the previous meeting;
- NIOSH will provide another update when the Board meets by telephone in September.

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REVIEW OF SEC WRITEUPS

Ames Laboratory

The language relative to this motion was voted on earlier and passed, but one modification was the insertion of the word "internal" in the second bullet so that the phrase would read "necessary to conduct accurate individual internal dose reconstructions."

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Hanford

The language on this motion was accepted at the time the motion passed, and a modification was offered in the second full paragraph describing the 300 Area so that the description will add the words "and research" so that the description will read, in part, "the 300 Area fuel fabrication and research facilities from October 1, 1943 through August 31, 1946."

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Bethlehem Steel

A motion was made and seconded that action on the Bethlehem Steel SEC evaluation report be postponed, and that the Board establish a working group on the use of surrogate data (data from other facilities) and dose reconstruction. The workgroup should examine NIOSH procedures, TIBs and site profiles to catalog the nature of surrogate data in the dose reconstruction process, evaluate this use and make a report to the Board that would include a framework for the appropriate use of surrogate data and recommendations for possible changes to current NIOSH procedures. Once the workgroup has reported back to the full Board on this issue, the Board will reconsider the Bethlehem SEC evaluation.

Discussion Points:

- Clarification that no limitation is intended by the last sentence of the motion;
- This is not a stipulation that the Board cannot act until the workgroup has fully completed all of its work, which could go on for a while;
- Observation that each SEC petition is site-specific and the use of surrogate data is site-specific;
- Unless this charge is to examine all the sites, it will delay the effort;
- SC&A evaluates the use of surrogate data, and the workgroups do when they look into the petitions;

- This could take forever;
- This is not a delay tactic and the application and use of surrogate data is made on an individual site basis, but there are some principles that can be derived that would help guide the use of that data more consistently from site to site, which is the goal;
- Guidelines were developed for the overall SEC evaluation procedure and is also individual, but provides an overview of the steps to be taken and guidance that would be applied in individual cases, which has been helpful;
- Since the sites are different, the establishment of consistency is going to be small;
- Concern that the two issues should be separated, with reluctance to tie a working group looking at surrogate data specifically to any one site.

Dr. Wade observed that this issue would not constitute a recommendation to the Secretary and, unless some absent Board members had left their vote with others, he would not pursue those votes after the meeting.

Dr. Ziemer offered that both **Mr. Griffon** and **Dr. Lockey** had left with him an indication that they were in support of the motion. It doesn't directly involve a recommendation to the Secretary, but involves delaying a recommendation to the Secretary so there is a level of importance for obtaining those votes, as well as **Mr. Clawson**'s.

Further Discussion Points:

- An observation that a working group to look at the issue is one thing that needs to be done, but it shouldn't be tied to an end result for an SEC petition.

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A motion was made and seconded to separate the tabling of the Bethlehem SEC evaluation from the establishment of a workgroup to study surrogate data.

Discussion continued on the motion to separate the two issues. After some clarification, the vote proceeded on the motion to separate the issues into two parts.

The motion carried by a vote of five to four.

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The motion to establish a workgroup carried unanimously.

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Dr. Ziemer explained that the other motion before the Board now would be that, once

the workgroup has reported back to the full Board, the Board will reconsider the Bethlehem SEC evaluation. He further explained that motion would be put aside if there were a motion to table the Bethlehem SEC.

A motion was made and seconded to table action on the Bethlehem Steel SEC petition.

A tabling motion is not subject to discussion.

The motion carried unanimously.

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Dr. Wade inquired whether the Board wanted to seek additional votes on the motion to separate, and **Dr. Ziemer**, as Chairman, ruled that it doesn't rise to the level that requires seeking those additional votes, noting his ruling can be challenged by the assembly, but ruled that solicitation of the votes of absent members are not required for any of the three votes just taken.

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Chapman Valve

This motion was voted on generally, but the precise wording was not available at that time. It was read into the record by **Dr. Poston**, Chairman of the Chapman Valve working group. A copy of the language is attached hereto and incorporated herein by reference.

Dr. Ziemer reminded the Board that this motion will only go forward if **Mr. Clawson**'s vote is to approve. If he should vote no, it would result in a six-six tie and there would be no action.

A question was raised on the result in the event of abstention from the vote. **Ms. Homoki-Titus** explained the Board's procedure speaks to what an eligible member is and defines them as those who have not been required to recuse themselves, those who have not abstained or those who may not be available to participate in a given vote. An abstention would not count; if they abstain it removes them from the count.

There were no objections recorded to the language of the Chapman Valve draft.

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BOARD WORKING TIME

Dr. Ziemer indicated he would like to have four members on the surrogate data working group and called for volunteers. Interest in participation was expressed by **Ms. Josie Beach**, **Ms. Wanda Munn** and **Mr. Phillip Schofield**. **Dr. Ziemer** agreed to seek a fourth member, since the appointments didn't have to be made at this time; he would

check with others to see if anyone else was interested and at the same time will designate a chair.

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Dr. Ziemer commented he had distributed team assignments for round eight of the dose reconstruction reviews, with copies provided to SC&A. He explained he had made every effort to take into consideration conflicts of interest, but requested that if any Board member finds he has missed their conflict, please let him know and they can be switched around.

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A letter from Illinois **Senator Barack Obama** was read into the record by **Mr. Jason Broehm** from the CDC Washington office. The Senator's letter addressed the General Steel Industries appendix to TBD-6000, asking the Board formally ask SC&A to perform a full evaluation of that document.

Dr. Wade remarked that the Senator's letter had been expected and he had asked **Dr. Mauro** from SC&A to familiarize himself with that TBD and others relevant in that context. **Dr. Mauro** commented he had read TBDs 6000 and 6001, each of which is a compendium of information dealing with uranium. He had seen a lot of the material before and SC&A is prepared to perform a review of both TBDs, explaining there is adequate budget within Task III to perform them this fiscal year and within this fiscal year's budget.

In the discussion NIOSH clarified that TBD 6000 is a general Technical Basis Document, with an appendix specific to General Steel Industries, which is so new it may not even be on the web site. The GSI appendix is a stand-alone document that deals primarily with the Betatron sources and other X-ray sources at GSI, which is likely what the Senator is referring to. The generic 6000 and 6001 TBDs are complex-wide documents which address over 100 Atomic Weapons Employers. There could be a meaningful review of the appendix without the review of the TBD 6000 document.

Discussion Points:

- Observation **Mr. John Ramspott** and **Dr. McKeel** had critiqued the GSI appendix but had made no comment on TBD 6000;
- There are eight completed appendices, with another eight in review;
- The appendices are very concise documents, only a few pages in length;
- An observation that there is no petition for General Steel Industries;
- NIOSH has consistently commented to **Dr. McKeel**, **Mr. Ramspott** and **Mr. Stephan** from the Senator's office that at any time they can submit an 83.13 petition, but they have not done so;
- A discussion on precisely what the Senator's request would entail, concluding that it was to ask SC&A to perform an evaluation of TBD 6000 and its appendices;
- A suggestion that since the TBD and the appendices go to how the dose reconstruction

work is done, it would be logical to have them reviewed by the procedures workgroup, which makes sense in the absence of a petition;

- A suggestion that the Board meet next in Illinois is anticipated and it would be nice to have the review well under way, if not completed, by that time;
- NIOSH is planning a worker outreach at GSI to explain how they're doing dose reconstructions, get their reactions to the NIOSH approach and whether it needs to be modified;
- The Board and SC&A will be notified when the time of that visit has been determined.

Dr. Mauro confirmed that while he had not realized there were a large number of appendices dealing with various sites, SC&A could do the TBD 6000 and 6001 reviews, as well as a review of the GSI appendix, in the budget. He cautioned the remaining 15 or so appendices would have to be done next year.

Dr. Wade noted that was something SC&A could begin immediately, indicating that the contracting officer will formally notify him of that instruction.

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Dr. Ziemer returned to the multiple motions on Bethlehem Steel for a clarification. He noted that in separating the original motion into two, he had failed to note that the first sentence of the motion postponed action on Bethlehem Steel and suggested the workgroup. In the division of the motion that wording technically should be moved into the second part.

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FUTURE SCHEDULE

Mr. Broehm read into the record an additional letter from **Senator Obama**, **Representatives Judy Biggert** and **Jerry Weller**, all from Illinois. This letter addressed the revised Blockson Chemical Company Special Exposure Cohort evaluation report and the fact that it will be discussed during this meeting, although not voted on. The letter requested the Advisory Board consider holding the meeting at which that petition will be voted on as close to Chicago as possible.

Discussions of the October 3, 4, 5 meeting and the January 8, 9, 10 meeting sites included Chicago, Las Vegas, Pittsburgh and Texas. Also discussed was the likelihood that there may be enough progress on the 250-day issue for discussion at the October meeting, and there is also a report from SC&A on Ames Laboratory which is relevant to that issue.

SC&A has delivered the Blockson report, but it has not been reviewed for Privacy Act concerns. A request to get some procedure in place to assure Privacy Act reviews are occurring in a timely fashion was discussed. There was clarification that any document generated by NIOSH staff, or its contractors, that will come into Board deliberations -- which includes documentation in support of an evaluation report, TBD

or TIB -- has to be reviewed by the Privacy Act office.

For worker outreach meetings sponsored by NIOSH, minutes are assembled from that meeting and individual identifiers or names are not permitted to be included. Sign-up sheets are collected and who was present at the meeting is noted, but once posted on the web site they're redacted by the Privacy Act office.

Ms. Homoki-Titus noted that the General Counsel's office only does Privacy Act review for the SC&A documents. Whether the documents are reviewed by the General Counsel's office, OCAS, or whoever, the documents ultimately go to the Privacy Act office as the final determination point.

Dr. Wade commented that there are written procedures in place which can be presented during the Board call in September. He explained there are three types of documents and it's very complex as to whether they're generated by SC&A, NIOSH or somebody else.

An observation was made that another source of information, and one at the center of **Dr. McKeel**'s concerns about the speed at which things appear on the web site, is information generated by a petitioner or a petition advocate which they believe to be important and want to get into the public venue. NIOSH has to be careful what goes on its web site, so they also have to go through Privacy Act office and get agreement that the information can go on the web site.

A concern was raised then about the web site and a need to make sure better service is provided to petitioners and other people in terms of what documents are on the site and how they're organized and indexed.

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Dr. Ziemer commented that in the Dow Chemical discussion he had gotten sidetracked by the discussion on the roles of DOL and DOE, and had forgotten SC&A was supposed to be a part of that discussion. Their report on the SEC petition review they'd been asked to perform was to have been presented.

Dr. Mauro reported SC&A had reviewed an additional 700 pages of new material and participated in an outreach program with **Dr. McKeel**. **Dr. Mauro** explained in that participation one of their mandates was to obtain information regarding thorium practices. He indicated they had nothing of substance to add regarding performance of dose reconstructions for thorium in the post-1960 time period. If given direction to obtain records from Dow or Spectrulite, they would work with NIOSH to seek additional records to cover that time period. That has not been done yet. Their report can be delivered shortly.

Dr. Mauro added **Dr. McKeel**'s transcript of the worker outreach meeting is being reviewed. A final report of those activities is probably two weeks away, but he noted it is constrained in that it doesn't go well into the post-1960 time period.

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With no further business to come before the Board, the meeting was adjourned at 3:10 p.m.

End of Summary Minutes

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I hereby confirm these Summary Minutes are accurate, to the best of my knowledge.

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Paul L. Ziemer, Ph.D., Chair

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Date